



**THE UNIVERSITY OF QUEENSLAND**  
A U S T R A L I A

**Weight stigma in health: (re)thinking weight in a physiotherapy context**

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## **Abstract**

The physiotherapy profession increasingly considers weight management to be part of its scope of practice. Ostensibly this may seem like a good idea: popular media and biomedical discourses highlight a global “obesity epidemic”, and physiotherapists, considered “experts in movement”, may be well placed to help address obesity by encouraging activity. On the other hand, an excessive focus on weight can have negative consequences. A large body of research now highlights negative attitudes towards those who are overweight (weight stigma) among health professionals, including doctors, nurses, dieticians, psychologists and exercise scientists. Yet, despite the size and impact of the profession, there has been little work exploring weight stigma in the context of physiotherapy.

My aims are two-fold. First, I investigate weight-related interactions in physiotherapy, and second, I investigate how weight might be (re)thought in this context. The first three thesis chapters provide a theoretical exploration of concepts relevant to weight in physiotherapy. In the introductory chapter I argue that it is helpful to draw from scholarship in critical psychology and the emerging field of critical physiotherapy. In Chapter 2 I consider traditional social psychological theories that provide a social and embodied understanding of weight stigma. However, I outline how these theories are notably apolitical, acultural, ahistorical and lack mechanisms for understanding power in stigma. To address this issue, I introduce post-structuralist perspectives (particularly those of Michel Foucault) that are often used in critical social science. Using a post-structural psychological lens, I critically examine the literature on weight and its associated stigma. As context specific understandings are desirable, I use Chapter 3 to examine the nature of the physiotherapy profession, to determine what might be relevant to “thinking weight” and considerations of stigma. Here I look in depth at this profession, discussing where power, the body, reflexivity and the profession’s ontological underpinnings might be relevant to weight-related physiotherapy interactions.

In Chapter 4 I outline the empirical approaches I took to further address the aims of the thesis, and discuss their underlying assumptions. Following this, in Chapters 5 to 7 I present three empirical studies, each of which is published in peer-reviewed journals (or under review). In a previous study (described in Chapter 3) I tested weight stigma in physiotherapists using attitude tests in an online survey. I found that participating physiotherapists held explicit and implicit weight stigmatising attitudes similar to those in related professions. Building on this earlier work, I conducted an inductive thematic analysis of interviews with patients who had experienced weight-related interactions with physiotherapists (described in Chapter 5). Participants spoke of perceiving weight stigma in a number of elements of physiotherapy interactions, elements of the physiotherapy environment and in the way that physiotherapy presents itself to the world. Following this largely inductive study, I designed a further study (described in Chapter 6) to delve deeper into why

physiotherapists might hold these attitudes and why patients perceived weight stigma in physiotherapy contexts. I facilitated focus groups of physiotherapists that I analysed using discourse analysis to identify participants' ways of thinking and talking about weight (their weight discourses). Seen through the lens of Foucault's theories of discourses as constitutive of reality, this study provided insight into what types of practices are likely in physiotherapy interactions. Findings suggested that physiotherapists require more nuanced understandings of: how patients who are overweight might feel in a physical therapy setting; the complexity of weight's determinants; and possible disadvantages of introducing weight management discussions with patients.

Drawing on the results of these studies and the theory outlined in Chapters 2 and 3, I devised a final study (described in Chapter 7) to develop a process for rethinking weight in physiotherapy, including an exploratory intervention trial. This study highlighted that: there is no simple singular cause of weight stigma; approaches to reducing weight stigma need to be complex, involved and delivered over time; a flexible process is desirable to cater to individuals' different contexts; reflexivity should be prioritised as a component of rethinking; and the specific context of the physiotherapy profession should be considered.

In Chapter 8 I draw together the theoretical and empirical work of this thesis to demonstrate that physiotherapy, a body-focused profession associated with mainstream healthcare and the fitness industry, is likely to be an environment where people who are seen as overweight might expect, and receive, weight stigma. This thesis presents important new findings for (re)thinking physiotherapy's intersection with body weight and forms a part of the process of helping the profession to think its way out of weight stigmatising tendencies. The findings of this thesis have implications for physiotherapy education and practice. Further, this thesis has applications for related health professionals and develops understandings of weight stigma more broadly. Using weight stigma as a stimulus for a wider (re)thinking, my research indicates that health professions that are predominantly biomedical in focus, such as physiotherapy, would benefit from incorporating broader perspectives including social, cultural, political and philosophical concepts into their core knowledges.

## **Declaration by author**

This thesis is composed of my original work, and contains no material previously published or written by another person except where due reference has been made in the text. I have clearly stated the contribution by others to jointly-authored works that I have included in my thesis.

I have clearly stated the contribution of others to my thesis as a whole, including statistical assistance, survey design, data analysis, significant technical procedures, professional editorial advice, and any other original research work used or reported in my thesis. The content of my thesis is the result of work I have carried out since the commencement of my research higher degree candidature and does not include a substantial part of work that has been submitted to qualify for the award of any other degree or diploma in any university or other tertiary institution. I have clearly stated which parts of my thesis, if any, have been submitted to qualify for another award.

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## **Publications during candidature**

Peer-reviewed journal articles:

- Setchell, J., Watson, B., Gard, M., & Jones, L. (2016) Physical therapists' ways of talking about overweight and obesity: Clinical implications. *Physical Therapy Journal*. 96(6), 865-875. doi: 10.2522/ptj.20150286
- Wigginton, B., & Setchell, J. (2016) Researching stigma as an outsider: Considerations for critical and ethical outsider research. *Qualitative Research in Psychology*. In press.
- Nicholls, DA., Atkinson, K., Bjorbækmo, W., Gibson, BE., Latchem, J., Olesen, J., Ralls, J., & Setchell, J. (2016) Connectivity: An emerging concept for physiotherapy practice. *Physiotherapy Theory and Practice*. 32(3), 159-170.
- Setchell, J., Watson, B., Jones, L., & Gard, M. (2015) Weight stigma in physiotherapy practice: Insights from patient experiences of interactions with physiotherapists. *Manual Therapy*. 20(6), 835-841. doi: 10.1016/j.math.2015.04.001
- Setchell, J., Leach, L., Watson, B., & Hewett, D. (2015). Impact of identity on support for new roles in health care: A language inquiry of doctors' commentary. *Journal of Language and Social Psychology*. 34(6), 672-686.
- Setchell, J., Watson, B., Jones, L., Gard, M., & Briffa, K. (2014) Physiotherapists demonstrate weight stigma: A cross-sectional survey of Australian physiotherapists. *Journal of Physiotherapy*. 60(3), 157-162.

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- Setchell, J. (2015) Considering stigma: Public health and physiotherapy. *Chartered Society of Physiotherapy Conference*. Liverpool, UK.
- Setchell, J., Watson, B., Jones, L., & Gard, M. (2015) Interventions to reduce weight stigma in healthcare: An overview and update. *International Society of Critical Health Psychology*. Grahamstown, South Africa.
- Setchell, J., Gard, M., & Tischner, I (2015) Bodies, voice and change: Exploring the construction of fat bodies in health. *In Sickness In Health (ISIH) Conference*. Mallorca, Spain.

- Setchell, J., Watson, B., Jones, L., & Gard, M. (2015) Weight stigma in physiotherapists: Implications for education, practice and physiotherapy. *World Confederation of Physical Therapy Congress*. Singapore, Singapore.
- Setchell, J., Watson, B., Gard, M., & Jones, L. (2015) Physical therapists' ways of thinking and talking about overweight and obesity: Clinical implications. *Australian Physiotherapy Association Conference*. Gold Coast, Australia.
- Setchell, J., Watson, B., Jones, L., & Gard, M. (2014) Physiotherapists demonstrate weight stigma: Implications for leadership in clinical practice and physiotherapy education. *APA Leadership Conference*. Cairns, Australia.
- Setchell, J., Watson, B., Jones, L., & Gard, M. (2014) Language used to discuss weight indicates weight stigma in physiotherapists' discussion of patient case studies. *International Conference on Language and Social Psychology*. Honolulu, Hawaii.
- Setchell, J., Watson, B., Jones, L., & Gard, M. (2014) Clients' perspectives on how health professionals negotiate weight. *International Weight Stigma Conference*. Canterbury, UK.
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- Incorporated as Chapter 5

Contributor	Statements of contribution
Setchell, J (candidate)	Designed study 85% Conducted study 100% Wrote the paper 100% Edited the paper 80%
Watson, B	Designed study 5% Edited the paper 10%
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Gard, M	Designed study 5% Edited the paper 10%



### **Contribution by others to this thesis**

As outlined above, Bernadette Watson, Michael Gard and Liz Jones contributed to the studies in Chapters 5–7. Bernadette Watson, Michael Gard and Liz Jones also provided editorial feedback on Chapters 1–4 and 8. Cat Pausé and Amanda Deardon gave insight into ethical elements of the study presented in Chapter 5.

### **Statements of parts of the thesis submitted to qualify for the award of another degree**

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stigma, obesity, physiotherapy, reflexivity, psychology, critical theory, fat studies, post-structuralism, Foucault, Goffman

**Australian and New Zealand Standard Research Classifications (ANZSRC)**

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110317 Physiotherapy 30%

160806 Social Theory 20%

**Fields of Research (FoR) Classification**

1701 Psychology 50%

1199 Other Medical and Health Science 30%

1608 Sociology 20%

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**List of abbreviations used in this thesis**

CPN	Critical Physiotherapy Network
BMI	Body Mass Index
WCPT	World Confederation for Physical Therapy

## **Chapter 1: Introduction and overview**

In this chapter I introduce and overview the topic of this thesis and outline my research approach. I start with a vignette from my personal experience as a clinical physiotherapist that highlights the reasons behind my interest in this topic.

### **Why weight stigma in physiotherapy?**

I was at a lunchtime gathering of a small group of clinical physiotherapy colleagues a few years ago. We had met on this occasion, as we did most weeks, to share some manual treatment techniques. This particular day, the techniques were for a complex joint at the back of the pelvis in the small of the back: the sacroiliac joint. Many physiotherapists think problems with this joint are one of the main contributors to (sometimes very debilitating) low back pain. The techniques involved a close examination of the movements of this part of the body by the physiotherapist placing their thumbs on the skin of a person who is standing. The person being assessed has their shirt off or pulled up and their trousers or skirt partially pulled down or removed. The physiotherapist crouches down behind the person so their eyes align with waist height. One thumb of the physiotherapist rests on the base of the spine, the other a little to one side of it on the top of the pelvis. The person being assessed lifts one leg and the physiotherapist observes the movement of their own thumbs (and thus the skin of the person they are assessing, and presumably the bones and joints underneath this). This assessment is one of those “learnt skills” that is quite difficult to master at first, but once the practitioner gets used to it, it is pretty clear. After the session ended, some of us were standing around discussing these assessment techniques. One of the physiotherapists mentioned that the technique would be very difficult to conduct on someone who was overweight. Another then said that she really didn’t like touching people who are overweight and that she found it disgusting.

These physiotherapists’ comments, and others like them, have led me to consider what effect these negative ways of thinking about people who are seen as overweight might have on physiotherapy encounters. My experience with that particular assessment technique has been that, after using it a few times, it was easy to use on people of any size. I might slightly adapt the amount of pressure of my thumbs, but I do not find the person’s amount of body fat to be a particular issue. It’s a very useful tool that I have used on literally hundreds of people over the years. Might this have been different if I thought that the technique would be difficult on a people who I considered overweight? Perhaps this perceived difficulty might have changed my competence in carrying out the technique or I may not have used that valuable tool on larger patients and, as a result, limited my diagnosis of their back problems. And what of the disgust or revulsion towards fatter flesh that

the second physiotherapist mentioned? Might feelings like these affect the way patients are treated, the establishment of trust and a respectful interaction that are so important to health professional interactions with patients?

These thoughts led me to an interest in the intersection between physiotherapy and weight. I became interested in exploring what happens when body weight, or more specifically body fatness, becomes more noticed or judged in physiotherapy interactions. Reflections on situations like the anecdote described above also triggered a deeper questioning of the physiotherapy profession. From my 20 years of lived experience within the profession, it seemed that conversations or self-reflection about stigma, prejudice, marginalisation – and to take this a little further, politics, ontology and philosophy – rarely occur in physiotherapy.

## **Overview of the thesis**

The primary aim of this research was to explore the intersection between physiotherapy and weight. For ease of discussion I will call the intersection *the physiotherapy–weight nexus*. The word *nexus* has two main definitions, both of which are relevant here: 1) a connection or series of connections linking two or more things and 2) a central or focal point. As body weight is involved in many aspects of physiotherapy, this nexus is fairly broad. For example, bodies are observed, moved and connect with various pieces of equipment in physiotherapy. However, in this thesis I am predominantly interested in investigating instances when body weight becomes psychologically salient. That is, I concentrate on where weight-related interactions become more “charged” and especially where they may involve stigma towards fatness. I pay particular attention to the physiotherapist’s role in this nexus (rather than other people involved, such as patients) and consider the institutional involvement of the physiotherapy profession. I take a broad approach to considering this physiotherapy–weight nexus, as there has been little research conducted in this area to date. Using a combination of theoretical and empirical research, I approached the topic in a variety of ways. The overarching research questions that drove the theoretical and empirical enquiry were:

- RQ1. Where, if at all, does weight stigma become a salient issue in physiotherapy?
- RQ2. What, if anything, is endemic to the physiotherapy context that might institutionalise weight stigma?
- RQ3. For the intersection between weight and physiotherapy, how might new possibilities be envisioned and implemented?

I start this work in Chapter 2, where I discuss the theoretical research that has been conducted on stigma, investigating what might be relevant to the physiotherapy–weight nexus. I outline and critique the main schools of thought on stigma, including work from a number of psychologists, sociologists and philosophers. Here I consider which approaches are most relevant to

this program of work and suggest that, as no single approach is sufficient, a combined approach would be beneficial. Furthermore, I discuss the significance of attending to stigma - that there are considerable physical and psychological effects. I then turn to consider the theoretical and empirical literature that has explored weight stigma specifically, investigating how this particular form of stigma is understood. I give particular focus to the healthcare context and to concerns regarding a contemporary intensification of weight stigma.

In Chapter 3 I investigate the profession of physiotherapy, considering what is likely to be particularly relevant to weight-related interactions. To do this, I consider possible effects of the primary theoretical assumptions that underlie the profession. Further, I discuss seemingly mundane elements of the profession, including the profession's focus on bodies, the attention given to biomedical aspects of health and a lack of intrinsic reflexivity. Furthermore, I investigate what has been previously considered in research or other professional discussion about the physiotherapy–weight nexus, including highlighting findings from an earlier study I conducted in which I investigated physiotherapists' explicit and implicit attitudes towards people who are overweight.

I then turn to the empirical work included in this thesis. Three studies are presented in Chapters 5 to 7. All have previously been accepted for publication (or are under review), so are presented in the form of journal articles. Prior to presenting these studies, in Chapter 4 I provide a discussion of the choices of methods I have used. In this chapter, I also explain the methodological, epistemological and ontological assumptions that underlie these methods, and introduce an understanding of the relationship of the individual studies to the overall thesis.

I developed specific research questions for the empirical work. *Study 1* (Chapter 5) relates to the first overarching research question outlined earlier in this chapter; *Study 2* (Chapter 6) relates to the second and *Study 3* (Chapter 7) to the third. The questions were:

- Study 1.*        How do patients perceive interactions with physiotherapists involving weight?
- Study 2.*        What are physiotherapists' dominant weight-related discourses?
- Study 3.*        How might physiotherapists rethink ways of working with people who are overweight?

In Chapter 5, building on my previous work that investigated physiotherapists' attitudes I introduce patient perspectives on the physiotherapy–weight nexus. I was interested in investigating whether patients discuss perceiving the stigmatising attitudes I had personally noted in the profession and found in my earlier research. I conducted situated repeat interviews with patients of physiotherapists, which explored experiences of weight-related physiotherapy interactions. I highlight how these patient perspectives are important to understanding physiotherapists' role in weight stigma.

Following this I present, in Chapter 6, a discourse analysis of focus groups I conducted with

physiotherapists. In this study I investigated which ways of thinking and talking (discourses) are dominant in physiotherapists' discussions about their work with patients who are overweight or obese. Employing a Foucauldian understanding of discourse as constitutive of reality, I considered the production of weight stigma in physiotherapy. Furthermore, this study offered insight into what clinical practices were more likely as a result of the dominant discourses the physiotherapists produced.

In Chapter 7 I present a final study that shifts focus from exploring the physiotherapy–weight nexus to considering ways to rethink physiotherapists' interactions with patients about weight. This study adds a theoretical exploration of existing weight stigma reduction interventions and trials. Further, I develop and trial a new method for researching and changing weight stigmatising attitudes in a physiotherapy context.

In Chapter 8 I draw together the theory explored in the earlier chapters with the results of the empirical research to establish integrated insights into the physiotherapy–weight nexus. This final chapter presents new possibilities for physiotherapy, and indeed healthcare generally, to reconsider its approach to working with people who are considered overweight. In particular, I discuss implications for clinical practice and education.

## **Overview of approach**

My research has an applied focus and is intended to be relevant and understandable to clinicians. This intention is particularly evident in the style of writing I used in the published papers in Chapters 5 to 7 (and Appendix A), where I adapted my language for biomedical journals. For example, my use of the label *patient* for those seeking or receiving healthcare is evident in my published papers. This term is a traditional biomedical label that has long been discussed as problematic due to its associations with passivity and disempowerment (e.g., Langer & Abelson, 1974). I also engage the term throughout this thesis, in part for consistency, but also to acknowledge semantically that physiotherapy has often not moved beyond these traditional understandings of people who access their care.

Part of the aim of the applied focus was to engage in an active discussion with the physiotherapy profession about the findings of this research. For example, I intentionally published and presented as I progressed, choosing to submit to profession-specific journals and take speaking engagements that reached a physiotherapy (or related health professional) audience. More informally, I had many incidental discussions with clinical colleagues. Further, as I continued to work part-time clinically as a physiotherapist throughout the project, in some ways I was in dialogue with myself, and my patients. Of course, I can only partially understand how this influenced the way I approached the project; however, I consider this “conversation” as an integral aspect of the research and refer to this interaction in Chapters 4 and 8.

This program of work is broadly situated across two disciplines: psychology and physiotherapy. In particular, I draw from critical psychology in order to explore and inform physiotherapy, and add to the small (but growing) field of critical physiotherapy. Critical theory draws from European philosophy in particular the Frankfurt School, where theorists aimed to challenge dominant cultural practices and beliefs, and encourage more humanistic ideals (Crotty, 1998). As Trede (2012) argued, critical theory remains important to research today as it “questions self-evident reality, challenges taken for granted assumptions, and critiques unreflected policies, practices and procedures” (p. 467). The strength of a critical approach, she argued, lies not only in “explaining and understanding realities of social life, but also [that it] builds on these to argue how things might be otherwise” (p. 467). Those who use critical perspectives in social science do not use a single or unified “critical theory”, rather they draw on a number of worldviews, including (among others) Marxism, feminism, queer theory and post-structuralism (Gough & McFadden, 2013). It is important to note that each of these worldviews is complex and diverse (Gough & McFadden, 2013). For example, as Weedon (1997) identified, there are many different versions of feminism, some that are derived from an essentialist ontology (the assumption that there is a single knowable truth), and others that challenge this assumption and are based on a relativist ontology (the idea that there are many truths, dependent on the perspective taken).

The sub-discipline of critical psychology is a diverse field of enquiry that arguably began in the 1960s (Parker, 1989). In response to major problems with traditional experimental approaches, such as power imbalances and lack of consideration of political context on psychological phenomena, early critical psychology predominantly employed essentialist Marxist and feminist approaches (Gough & McFadden, 2013). Critical psychology has enjoyed a new wave since the late 1980s, with theorists such as Ian Parker arguing that earlier critical perspectives had failed to address major issues in the discipline. For example, Parker (1989) posited that attempts to “rehumanise” those who are marginalised or disempowered established a binary that only reinforced marginalisation or “othering”. This new wave of critical psychology scholars argued for the benefits of incorporating relativist approaches such as post-structuralism and post-modernism (Parker, 1989).

Critical psychology is a diverse field. I draw particularly from critical health psychology (M. Murray, 2004, 2015) and critical social psychology (Gough & McFadden, 2013; Tuffin, 2004), which together provide socially situated insight into how people interrelate within the context of health. Based on their relativist ontological assumptions, critical psychology scholars commonly design research using a social constructionist epistemology that considers the political, social, historical and cultural elements of phenomena. These assumptions tend to favour qualitative research methodologies. However, I agree with authors, such as Marks (2002), who argue that any

research methodology has the potential to be critical if it is analysed using a critical theoretical approach.

Critical physiotherapy is a considerably newer sub-discipline. The term was first introduced in the literature by Trede (2006) and has been developed further by a small number of authors (notably: Gibson, Nixon, & Nicholls, 2010; Gibson & Teachman, 2012; Nicholls & Gibson, 2012; Praestegaard, Gard, & Glasdam, 2015). The Critical Physiotherapy Network (CPN), which formed in 2014 (Nicholls, 2014), defines critical physiotherapy work as: challenging current boundaries of physiotherapy thought and practice by “recognising and problematising power asymmetries inherent within practice, particularly where they marginalise some groups at the expense of others” and “being open to a plurality of ideas, practices, objects, systems and structures that challenge contemporary physiotherapy practice and thought” (CPN Website: Constitution, 2015). While this sub-discipline is too young to have an established research history, theorists have generally used the work of European post-structuralist philosophers such as Foucault and Deleuze, or phenomenologists such as Merleau-Ponty.

## **Reflexivity**

Part of the “critical turn” in psychology has been about consideration of the influence, power and positioning of the researcher in the research process (Gough & McFadden, 2013). Critical psychologists argue that the researcher is often rendered invisible in published research, yet inevitably influences research findings in a number of ways (Chamberlain, 2015). While research methods grounded in positivist theoretical perspectives (such as quantitative research) consider this subjective influence to be a negative factor (bias), in relativist research it is taken as a given that knowledge is always located and relative to the context and conditions of its creation (Braun & Clarke, 2013; Chamberlain, 2015; Gough & McFadden, 2013; Tuffin, 2004). One way to approach this issue is by explicitly and critically examining the researcher’s assumptions, positioning and influence on the research process. This type of examination is usually considered part of demonstrating rigour and quality in reporting research (Braun & Clarke, 2013) and is often called research reflexivity. Reflexivity is a broad concept and there are a number of types used in research (Chamberlain, 2015). In this thesis I refer to research reflexivity in two main ways, which I will highlight here for clarity and consistency. However, it is important to note that forms of reflexivity are not always distinct but can overlap, and terminology is not necessarily consistent between different disciplines and authors (Chamberlain, 2015).

The first way I use research reflexivity is to discuss the assumptions underlying my choices of research methods and methodologies, and what this might mean for my research findings. This is highlighted in more detail in Chapter 4. Secondly, I use personal reflexivity. As Braun and Clarke (2013) argued, explicit acknowledgement of the researcher’s subjectivity, using a process of

personal reflexivity, is usually considered important in research based on relativist ontologies. Personal reflexivity involves a conscious and contextualised understanding of the interaction between the researcher and the research, and includes how the researcher may have influenced the focus or results of the research (Braun & Clarke, 2013). I discuss my own positioning in the research presented in Chapters 6 to 8 and in more detail in the final chapter.

To avoid any confusion, it is also important to note that I use the term *reflexivity* in one other context during this thesis. I discuss reflexivity as a professional practice rather than as a research practice when considering physiotherapists in Chapter 3 and in my empirical research. Specifically, at a number of points I discuss physiotherapy's professional ability to reflect on its own practices on a theoretical level, together with traditions that encourage individual physiotherapists to use (or not) applied reflexive processes.

### **Summary**

Beginning with the anecdote, this chapter outlines the approach and rationale that underpin the theoretical and empirical research presented in the following chapters. The next chapter examines stigma and, in particular, weight stigma.



## Chapter 2: Stigma and weight

*Our capitalist ethos loves a certain kind of inscription, insisting we read tallies of sloth and discipline inscribed across the body itself.*

Jamison, 2015

There is a sizeable body of literature that can contribute to theoretical and empirical work relevant to stigma, weight and its nexus with physiotherapy. For example, writing on the reasons for, and definition(s) of, stigma highlights the breadth of thinking on the topic, and is useful to establish the domains of stigma I focus on in this thesis. In this chapter I define stigma and discuss a number of theorists' endeavours to understand it. In particular, I build on Goffman's (1963) notion of a spoiled identity using a critical psychology perspective grounded in post-structuralist theory and largely based on the work of philosopher Michel Foucault (Tuffin, 2004). Following this, I shift focus to consider weight stigma specifically, discussing its significance, prevalence, intensification and production through discourse. I particularly attend to literature that discusses weight stigma in healthcare, as it is likely to be relevant to physiotherapy. Finally, I discuss attempts to reduce weight stigma that have been reported to date.

### **Stigma definition(s)**

Research on the nature of stigma has spanned a number of disciplines, most notably sociology and social psychology. This interdisciplinary history may partially explain why there are many definitions of stigma (J. Phelan, Link, & Dovidio, 2008). Furthermore, there are numerous stigmatised characteristics, each with individual features that contribute to this lack of a single definition. Crocker, Major and Steele (1998) produced a widely used definition: "stigmatized individuals possess (or are believed to possess) some attribute, or characteristic, that conveys a social identity that is devalued in a particular social context" (p. 505). Their definition outlines some of the major components of stigma: it is linked to an attribute (*stigmatised people possess an attribute*), it involves negative judgement (*devalued*), it is social rather than individual (*conveys a social identity*), it does not reside within a person or the stigmatised characteristic but is interactional (*social identity*) and it is not a static phenomenon but is created in some contexts but not others (*in particular social contexts*). However, some theorists from a critical perspective have argued for a stronger emphasis on power and the political, cultural construction of stigma (Hannem, 2012). Still others ask for a stronger sense of the embodied and affective elements (Hacking, 2011).

Stigmas vary (Goffman, 1963; Link & Phelan, 2001). A number of factors, including the

stigmatised characteristic's visibility and perceived controllability, affect the extent and form of discrimination that a member of a stigmatised group suffers (Hogg & Cooper, 2003). While not fixed or entirely distinct categories, stigma can be usefully conceptualised as explicit or implicit (Bos, Pryor, Reeder, & Stutterheim, 2013). Explicit stigma is a concept used to describe people's open expression of their stigma, for example by verbalised aversion, ridicule, discrediting or stereotyping (Dovidio, Major, & Crocker, 2000). Explicit expression of stigma can be reduced by social desirability, where people's attitudes become more implicit due to expected judgement for being stigmatising (Roland, 2008). Implicit stigma is described as a subtle expression of judgement, where people may be unwilling to be openly stigmatising and may even lie to hide their negative attitudes. This type of stigma may be detectable in body language, such as an avoidance of eye contact, or indirect assumptions based on stereotypes (Brewis & Wutich, 2012).

Bos et al. (2013) classified stigma as occurring in four main domains: public stigma, structural stigma, stigma by association and self-stigma. These authors define public stigma as people's reactions to someone else with a condition they perceive as stigmatised (e.g., a derogatory verbal remark from one person to another about a stigmatised characteristic); structural stigma as societal or institutional legitimisation and perpetuation of a stigmatised characteristic (e.g., stigmatising assumptions embedded in public health statements); stigma by association as stigma directed towards someone who does not have the stigmatised characteristic but is stigmatised due to their perceived relationship to someone who does (e.g., when parents of children with a stigmatised characteristic are assumed to be "poor parents"); and self-stigma as stigma directed towards oneself (e.g., feelings of self loathing associated with possessing a stigmatised characteristic). In this thesis, I focus primarily on structural and public stigma as I examine the institution of physiotherapy and individual patient–physiotherapist interactions, although I briefly refer to self-stigma in Chapter 5.

It is also relevant to note that there is some confusion about the apparently overlapping terms *stigma* and *prejudice*. J. Phelan et al. (2008) investigated 18 models of stigma and prejudice concluding that they were "one animal not two" but with a difference in focus: prejudice usually refers to overarching identities such as race, while stigma refers to "deviant" behaviours, disease and disability. For these reasons, and for consistency, I employ the term *stigma* but also incorporate insights from literature investigating prejudice. For the purpose of this research, I use the term *discrimination* or *discriminatory behaviour* to discuss behaviour based on stigma (or prejudice).

### **Theorising stigma**

I now explore in more depth theoretical approaches to stigma. I start by critically examining approaches commonly used in psychology, leading on to clarify which theories will inform this thesis.

### **Psychological approaches.**

Psychology uses three main approaches to understand stigma. The *social cognition approach*, introduced by Lippmann (1922) and revisited by Allport (1954), explains stigma as the result of a cognitive oversimplification of the large amounts of information people process about others they come into contact with. This explanation has received considerable criticism for being overly simplistic (Wetherell & Potter, 1992), particularly as it cannot explain why only some people stigmatise. This approach suggests that all minds function similarly, and hence stigma is represented as a natural part of being human (Gough & McFadden, 2013). As a result, this theory has been critiqued for its individualistic focus. While this approach might apply to some occasions of public stigma (defined in the previous section as one person stigmatising another), it is unable to account for structural aspects: the societal or institutional perpetuation of stigma.

Another individualistic approach is the *personality trait approach* that is associated with Adorno, Frenkel-Brunswick, Levinson and Sanford (1950) and more recently Frosh (1997). As the name suggests, this theory incorporates personality and emotional aspects of stigma, moving beyond the cognitive focus of Lippmann and Allport. Drawing from psychoanalysis, the personality trait approach posits that people with certain personality types stigmatise. Like the social cognition approach, this approach has been criticised for oversimplifying the interplay between individuals and their social worlds (Gough & McFadden, 2013), and lacks a framework for understanding structural stigma. The personality trait approach constitutes personalities as static and therefore does not allow for analysis of stigma or prejudice that is incited socially or politically in particular contexts. While largely discredited as comprehensive theories, Dixon and Levine (2012) argued that individualistic approaches continue to underpin most social psychology research into stigma.

The third main psychological theory for understanding stigma was developed more recently and is becoming widely used. The *group membership approach* centres around realistic group conflict theory (Sherif & Sherif, 1969) and social identity theory (Tajfel & Turner, 1985). These theories focus on the effects of group membership on the psychology of individuals and have strong groundings in the work of Goffman (1963). This approach argues that when people behave as members of a group they react to other people according to their group's social beliefs in order to consolidate their own sense of identity, or as a result of cognitive simplifications (Tajfel & Turner, 1985). As a result, it is argued that people give preferential treatment to those they identify to be part of the same social group as themselves and may stigmatise other people on the basis of perceived other group membership (Tajfel & Turner, 1985). While this approach is more social than the previous two, as it addresses dynamics between different groups, there are some criticisms. As with the social cognition approach, the group membership approach also casts stigma as a by-product of cognitive simplifications, although this time within a social context. As a result, the same

criticisms regarding the nature of stigma as inherent to human thinking are relevant (Tuffin, 2004). The extent of the social nature of this theory is also contested as some authors have argued that groups are considered in isolation from wider contexts and treated largely as having simplified, stable characteristics (Jenkins, 2008). This results in problems with the universal application of this theory. For example, some cultures tend to favour people from other groups rather than react negatively or stigmatise them (Gough & McFadden, 2013).

All of the above theories can be critiqued as being acultural, apolitical and ahistorical. As a result, I argue they are not able to account for possible structural aspects of stigma relevant to the physiotherapy–weight nexus. I also contend that they lack a framework for understanding the embodied and emotional aspects of stigma that may be relevant to physiotherapist–patient encounters. For the purposes of this thesis, I largely leave behind the individualistic social cognition and personality trait approaches outlined above. However, I investigate further some of the social aspects of stigma attended to in the group membership approach. To do this, I look more closely at a theorist whose work underpinned the group membership approach.

### **Goffman's perspective.**

Much of the thinking about stigma in the last fifty years has been based on the seminal work of Canadian sociologist Erving Goffman (Link & Phelan, 2006). Goffman did not see stigma as the by-product of group membership effects on cognitive simplification; he saw it as socially produced (Hannem, 2012). He also investigated embodied aspects of stigma (Hacking, 2011).

Through ethnographic explorations of mainly interpersonal interactions, Goffman (1963) described stigma as an “attribute that is deeply discrediting” (p. 12) and marks a spoilt identity. He noted that when someone is stigmatised they are “reduced in our minds from a whole and usual person to a tainted, discounted one” (p. 13). In this way, stigma involves stereotypes, where a person is assumed, on the basis of a stigmatised characteristic, to have other (often negative) attributes. These assumptions can lead to discrimination and, at times dramatically, limit the life chances of the stigmatised person (Link & Phelan, 2006). Stigma, according to Goffman, should be seen as a social process even if it is only directed at one person, as the person's individual characteristics matter less than the social markers of stigma (R. Brown, 2010).

Understanding stigma as produced through social interaction, rather than residing within the stigmatised person or characteristic itself, can be useful to investigate how interactions between physiotherapists and patients might produce weight stigma. Goffman's theories point to the importance of the way physiotherapists interact with patients, and highlight that this is a possible place where stigma is produced. On a broader level, a social understanding highlights the possibility that the social environment created by the physiotherapy profession may produce stigma and judgement.

Goffman also gave considerable and detailed focus to the embodied and “felt” aspects of stigma (Hacking, 2011). He detailed, for example, the suicidal ideation of a young woman with facial disfigurement, the “anxious unanchoring” (p. 29) felt by someone with visible stigma in social situations, and also the positive elements of a new perceptiveness that may come from experiencing stigma (Goffman, 1963). In his quotations from people who had experienced stigma, his readers can feel the un-ignorable fleshy presence of the stigmatised body. For example, he outlined an experience of someone looking in the mirror after recovery from physical trauma: “It was there, it was there, it was real. Every one of these encounters [with themselves in the mirror] was like a blow on the head” (Goffman, 1963, p. 19). Thus, for Goffman and many of the social psychologists and sociologists that refined and built on his work, stigma was a fleshy experience, where bodies and feelings were important. As clinical physiotherapy interactions are often body-focused and, I would argue, need to involve consideration of patients’ feelings (see Chapter 3), this embodied aspect of stigma is likely to be salient to the physiotherapy–weight nexus.

### **A post-structuralist perspective.**

While Goffman’s approach can explain some aspects of stigma, his theory lacks any mechanisms to understand the effects of political, cultural or historical variations on stigma, and does not directly consider the relevance of power (Hannem, 2012). To address these issues I add to Goffman’s understandings using a post-structuralist approach (Crotty, 1998). In particular, I draw on work based on theories of the French post-structuralist philosopher Michel Foucault to understand political, historical and power elements of stigma. Hacking (2011) argued that using a Foucauldian perspective on its own to understand stigma lacks the embodied, emotional and interactive elements that I have highlighted above within Goffman’s theories. While some might take issue with bringing together the experiential subjectivity of Goffman with post-structuralist theory, I concur with both Hacking and Hannem, who argued that Goffman and Foucault can compliment each other in understanding stigma.

Foucault considered behaviour, interactions and feelings to be produced through particular ways of thinking (he called them discourses), which he saw as created by not only social context (as per Goffman), but also political, cultural and historical context (Foucault, 1977a, 1978a). Applied to stigma, Hannem (2012) wrote that this means stigma is not only socially, historically, culturally and politically situated, but also *created* or *recreated*. Consistent with critical psychology approaches, this suggests that stigma is not finite or static but may be (re)constructed in varying environments, and may be linked to broader inequalities (Tuffin, 2004). Physiotherapy could be one such environment and will be examined in this way in Chapter 3.

Foucault’s theories (particularly those on governmentality) contribute an understanding that power and governance are exercised not only by the state and its institutions, such as the army and

police, but also by other institutions that are not traditionally seen as exercising power (Foucault, 1979). Applying this thinking to stigma, Hannem (2012) noted that stigma in an institutional setting comes from the institutionalisation of ways of managing the perceived risk of a stigmatised attribute. She argued that the institution often intends overtly to help, yet “when the need for assistance is justified by the inherently ‘different’, ‘risky’ or ‘tainted’ characteristics of the population, stigma is created in the very agencies that are supposed to be providing help” (Hannem, 2012, p. 25). With characteristics identified as risky, a certain “truth” is produced that they (or the people that possess these characteristics) require management, or what Foucault would call “discipline”. Foucault argued that the ingenuity of this system of power (or what he referred to as “regimes of truth”) is that any people, even those who possess the “risky” characteristic themselves, can take up this disciplining action. People are thus disciplined (or discipline themselves) to manage this socially produced risk-truth so that they are maintained as “productive citizens” to support the “greater good” of society (Farrugia, 2009). Thus, from a Foucauldian perspective, a person can be seen as “unproductive” or “expensive” and can be held individually accountable for this lack of productivity (Foucault, 1978b). As the epigraph by Jamison at the start of this chapter poetically highlights, it follows that “tallies of sloth and discipline” can be read of the body. Like Jamison wrote of “our capitalist ethos”, Foucault (1979) argued that this way of viewing people is in line with neoliberal economic rationalist systems of governance, where there is a focus on individual (rather than state) responsibility for productivity. Similarly, the body itself can be considered unproductive, and such a body might be disciplined to create a more productive body. In this way power is interwoven into some forms of stigma. It is important to note, however, that this power moves in both directions; people who are stigmatised can resist against individuals or institutions (Foucault, 1977b).

These theories on power provide an opportunity to explore the production of truths in the profession of physiotherapy that may result in stigma. Later in this chapter I refer back to these theories of power, truth and discipline in relationship to weight stigma specifically.

In summary, I argue for a combined theoretical approach to stigma to understand possible stigma in the physiotherapy–weight nexus. I have moved beyond individualistic approaches to stigma and used Goffman’s theories to propose that stigma is social and embodied. I argue that the social elements of Goffman’s theories are important to understand on a micro-level what occurs in interactions between physiotherapists and patients. Further, I have suggested that his consideration of embodied elements is important to understanding how the people physiotherapists treat might feel and that the bodies in the treatment room might be important. I have extended Goffman’s work using post-structuralist perspectives that provide an understanding of the involvement of power, where people/institutions produce “truths” about what is “normal” and employ practices to

discipline those considered “not normal”. I also argue that post-structuralist perspectives are useful to explore political and cultural elements of stigma production in physiotherapy.

While these broad theories on stigma are valuable, Goffman closed his seminal work on stigma by noting that it is useful to consider how stigmas differ (Goffman, 1963). Link and Phelan (2001) argued that different conditions are stigmatised in different ways. For example, as alluded to earlier, the extent and focus of stigma can vary with the visibility or perceived controllability of a stigmatised attribute (Hogg & Cooper, 2003) and can be affected by social attitudes towards those who express stigma (Roland, 2008). I now turn to explore weight as a salient attribute that can be, to use Goffman’s words, “deeply discrediting”.

## **Weight stigma**

### **Definition of terms and overview.**

As Duncan (2008) wrote, labelling someone as overweight is never a neutral endeavour. Similarly, Vartanian (2010b) argued that “a notable feature of weight bias is the collection of terms used to refer to people” (p. e195). Vartanian (2010b) found the word *obese* to evoke greater negative evaluations than *fat*. However, a study by Brochu and Esses (2011) indicated that the term *fat* sparks more negativity than *overweight*. The words *obesity*, *bariatric* and *overweight* are biomedical terms that are currently the most preferred in medical discourses. Yet I suggest that these words position the fat person as “not normal” or “unwell” (Setchell, Gard, & Tischner, 2015). For example, the words *obesity* (Anderson, 2012) and *bariatric* are both medicalising terms that necessarily ascribe a state of ill-health to a person. By the use of the prefix *over*, the term *overweight* implies that a person has more weight than is currently deemed “normal”. To create distance from these biomedical terms, the words *fat* and *person of size* are generally adopted by those who advocate for fat positivity, academics in the area of fat studies, sociologists and some fat people themselves (C. Cooper, 2010; Duncan, 2008).

The little three letter word *fat* has experienced a few different moral incarnations: a neutral descriptor for a type of body tissue, a derogatory term and a term of pride in the fat positive literature. Labels for a larger body may mean different things in different contexts. For example, lower income women in North America saw both the words *overweight* and *obese* as highly stigmatising, and *obese* to mean much more fatness (>500 lb/227kgs) than necessarily indicated by the obese body mass index (BMI) categories (Ellis, Rosenblum, Miller, Peterson, & Lumeng, 2014). In my research I use a combination of terms to show support for those who advocate for fat positivity, as well as to acknowledge that this thesis is in many ways “a conversation” with a biomedical profession. In particular, I use the terms *fat* (or its derivatives) and *overweight* interchangeably.

For the purposes of this thesis I use the term *weight stigma* to refer to the stigmatisation of a person who is seen as overweight or fat. Being underweight may also be stigmatised but has a different set of social circumstances (M. Allison & Lee, 2015; Swami & Monk, 2013) and is outside the scope of this research. Fitted into the definition of stigma discussed at the beginning of this chapter, *weight stigma* conveys a social identity that has low social value, at least in some contexts. As weight is a highly visible characteristic and currently often perceived to be controllable (Crandall et al., 2001), it is likely to be highly stigmatised (Crocker et al., 1998; Hogg & Cooper, 2003). Numerous authors have argued that a component of weight stigma is the reproduction of stereotypes such as laziness, sloppiness, lack of intelligence, unattractiveness and lack of self-discipline (as summarised by Puhl & Heuer, 2010). In a health context, another aspect of these stereotypes is perceived lack of compliance with healthcare behaviours (Puhl & Heuer, 2009).

Like other forms of stigma, weight stigma has been discussed as expressed both explicitly and implicitly. Explicit weight stigma is often more frequently expressed when a stigmatising characteristic remains socially acceptable (Puhl & Brownell, 2001). This type of stigma is openly expressed, for example, a participant in a study by Lewis et al. (2011) says: “you’ll be sitting in a restaurant and someone will say ‘I bet you they are going to eat two meals’” (p.1352). Implicit expressions of weight stigma are more subtle and can include an unspoken assumption in a medical consultation that a patient will take less responsibility for their health if they are overweight (Mold & Forbes, 2011). Weight stigma may be felt and experienced by the person who is perceived as overweight (Barlosius & Philipps, 2015), for example, people have described feeling rejected, excluded and isolated (Lewis et al., 2011). Post-structuralist theory, such as that presented earlier, also highlights the importance of power, and sociopolitical and historical construction of ways of viewing the fat body (S. Murray, 2008).

### **Weight stigma in the general population.**

Empirical research on weight stigma has proliferated over the past two decades, with hundreds of papers being published in the last five years alone. Most of these studies were conducted using a positivist theoretical perspective, thus presenting ‘findings’ as fixed and essential. A critical perspective highlights, however, that any investigation can only provide a partial insight into a topic (Haraway, 1988). Further, most of the literature investigates weight stigma as an ‘attitude’. From a post-structuralist perspective, defining attitudes as discrete and residing within a person neglects the socio-cultural construction and location of stigma. However, as much of the literature has looked at weight stigma using this partial understanding of stigma, I argue that it is important to consider (while acknowledging its limitations).

There are now many studies on a variety of populations that have “found” pervasive and increasing weight stigma (as summarised by Puhl & King, 2013). For example, a study of 2,866



people in four countries (Canada, Australia, Iceland and USA) indicated that levels of weight stigma were high and similar across the countries (Puhl et al., 2015). Levels of perceived discrimination have been compared with those of racism and sexism (Puhl, Andreyeva, & Brownell, 2008), and a North American study reported that the prevalence of perceived discrimination almost doubled between 1995 and 2006 (Andreyeva, Puhl, & Brownell, 2008). Contributing to the partiality of the understanding of weight stigma, most research on this topic has been conducted in Western countries. However, in a globalising world many cultures are argued to be moving towards Western ideals of bodily thinness (Brewis, Wutich, Falletta-Cowden, & Rodriguez-Soto, 2011), although there is also evidence of resistance (Antin & Hunt, 2013). In a study of 71 countries, Marini et al. (2013) claimed that all nations demonstrated anti-fat bias. Similarly, in cultural surveys, Brewis et al. (2011) reported weight stigma in the 10 countries they studied. Marini and colleagues reported considerable differences in weight stigma across 71 nations, with a positive relationship between the wealth of the nation and implicit weight stigma. Conversely, Brewis and colleagues reported that weight stigma was highest in middle-income countries. Taken together, and considered critically, these studies indicate a shift in sociopolitical construction of the fat body in current times (at least in the West).

To further situate and consider the complexity of weight stigma, some authors have discussed the intersectional effects between weight stigma and other types of stigma or prejudice, such as homophobia, sexism, racism and ableism (van Amsterdam, 2013). For example, in their literature review and analysis of public health document references to lesbian obesity, McPhail and Bombak (2014) argued that queer sexualities have historically been constructed as “at risk” and “sick”, and that public health literature on fatness often re-pathologises lesbians. Further, the intersection between weight stigma and race has also been discussed, with a number of authors pointing to a complex relationship between adherence and resistance to thin body ideals that are often seen as imposed by white cultures (Antin & Hunt, 2013; van Amsterdam, 2013; Wee, Davis, Chiodi, Huskey, & Hamel, 2015). Probably due to many societies gendered construction of the value of appearance, a number of authors highlight that weight stigma interacts differently with different genders (van Amsterdam, 2013). Feminist scholars such as Orbach (1978) and Bordo (2003) have written extensively about the relationship between weight stigma and sexism. Relatedly, many empirical researchers have reported that women who are large receive considerably more prejudice than men who are large (e.g., Antin & Hunt, 2013; Hayden, Dixon, Dixon, Playfair, & O'Brien, 2010; Monaghan & Malson, 2013; Rothblum, Miller, & Garbutt, 1988; van Amsterdam, 2013; Wee et al., 2015). Further, some studies have reported that men are more likely to stigmatise other people for being overweight than women are (e.g., Puhl et al., 2015). Fat men have also been claimed to be recipients of stigma, although Bell and McNaughton (2007)

argued that the focus is often on lacking stereotypically masculine qualities such as muscularity and fitness rather than thinness per se. Bergman (2009), who is transgender but is sometimes read as either a man or a woman, discussed the lived experience of being fat. The author argued that when seen as a man “he” is accepted as just being a big man, but as a woman “she” is seen as revoltingly fat.

Although weight stigma is likely to be currently prevalent and intensifying, it is not a new phenomenon. While larger bodies have been seen positively as healthy and attractive in certain historical and cultural settings, weight stigma has also been evident throughout history (Gilman, 2008). This variance of attitudes towards weight over time and culture prompts enquiry into why these attitudes are relatively newly recreated or reinvigorated in the current sociopolitical climate. Taking a post-structural approach provides an opportunity to understand the increasing prevalence and pervasiveness of weight stigma discussed above, and may help provide some guidance for reducing it. I will return to the contemporary production of weight stigma using this perspective when I discuss discourses in the section titled “Production of weight stigma through discourse”, and further in the theoretical section of the study in Chapter 7.

Considering that healthcare and physiotherapy are embedded within, and entwined with ‘the general population’ the literatures discussed in this section provide some direction for considering the physiotherapy–weight nexus. That is, elements of these partial knowledges of weight stigma might play out and/or there may be some peculiarities within the context of healthcare and physiotherapy.

### **Weight stigma in healthcare.**

Much of the study of weight stigma has focused on health professionals, with the topic receiving considerable media and research attention over the past 10 years (Puhl & Heuer, 2009; Puhl, Luedicke, & Grilo, 2013; Tomiyama et al., 2015). Kirk et al. (2014) used a post-structuralist feminist perspective to investigate larger people’s perceptions of healthcare providers in Canada, writing that there was a prevailing medical management discourse and that blame was constantly a “devastating relation of power” (p. 793). These authors discussed how the healthcare system was generally unsupportive of people living with obesity. S. Murray (2008) took this point further, arguing that the medical narratives that construct obesity as a disease and an epidemic have generated greater weight stigma (or as she puts it “greater fears of fatness” p. 7). Again, a post-structuralist, critical perspective highlights that these literatures can only present partial understandings of weight stigma that are contingent on perspective and socio-temporal context amongst other things.

There is now a considerable amount of experimental research that has “found” weight stigma in health professionals. For example, a study of 2,284 doctors (Sabin, Marini, & Nosek,

2012) and another of 4,732 medical students (J. Phelan et al., 2014) in the United States found both explicit and implicit weight stigma at similarly high levels as in the general population. Other studies on doctors have supported this finding in the United States (Dickson, 2011; Hebl & Xu, 2001), as well as the United Kingdom (Harvey & Hill, 2001) and Australia (Campbell, Engel, Timperio, Cooper, & Crawford, 2000). Likewise, other health professionals have been reported to show weight stigma, including clinical psychologists (Harvey & Hill, 2001), nurses (Mulherin, Miller, Barlow, Diedrichs, & Thompson, 2013; Poon & Tarrant, 2009), rehabilitation professionals (Wise, Harris, & Olver, 2014) and dieticians (Stone & Werner, 2012). Multidisciplinary health professionals specialising in obesity management also demonstrated weight stigma (Teachman & Brownell, 2001; Tomiyama et al., 2015). Similarly, other professionals that, like physiotherapists, focus on the body and movement have also demonstrated weight stigma, including physical educators (Greenleaf & Weiller, 2005; O'Brien, Hunter, & Banks, 2007) and exercise science students (Chambliss, Finley, & Blair, 2004). The research outlined in this paragraph presents a strong body of literature, much of it published by well-regarded academics in high quality journals. However, this research can only help understand certain aspects of weight stigma and is highly reliant on constrained methods such as attitude tests that almost exclusively investigate individual and (assumed to be) static aspects of stigma. Taken with the post-structuralist literature presented in the preceding paragraph, I argue that health professionals construct fat patients in particular and (at least at times) stigmatising ways.

Despite the size and impact of physiotherapy (Higgs, Refshauge, & Ellis, 2001), little work has been done on weight stigma in this profession. I address the small amount of research that exists in greater detail in Chapter 3, where I focus on physiotherapy specifically (this includes discussion of my own earlier work on the topic). I also detail how I will fill some of the research gaps that exist.

### **Discriminatory behaviour.**

In the previous section I outlined literature that largely discussed weight stigma as an attitude (and acknowledged some limitations to this), but did not explore the relationship between these attitudes and discriminatory behaviours. In comparison to the number of studies on weight stigma, there have been a relatively small number of empirical investigations of the relationship between these attitudes and behaviour. Bessenoff and Sherman (2000) reported that implicit weight stigma correlated with social discrimination, and a study by O'Brien et al. (2013) claimed that explicit weight stigma predicts discriminating behaviours. In contrast to these studies, however, an earlier study on discrimination in employment settings O'Brien et al. (2008) questioned the relationship between outcomes of explicit attitudes tests and behaviours. Whether an individual who has stigmatising attitudes also acts in a discriminatory manner is unclear.

Discriminatory weight stigma behaviours on their own have received a relatively small amount of research attention in comparison to literature on attitudes. A number of empirical studies reported that there is discrimination in employment against people who are overweight or obese (Swami, Pietschnig, Stieger, Tovée, & Voracek, 2010). This type of discrimination is much more common for women (Rothblum et al., 1988) and extremely common in the severely obese (Roehling, Roehling, & Pichler, 2007). Discriminatory behaviour has also been reported in health professionals and other professions that have similarities to physiotherapy. For example, health professionals have been discussed as over-emphasising the influence of weight on health, seeing it as the sole or main cause of other presenting symptoms (Drury & Louis, 2002). Stone and Werner (2012) argued that treatment of overweight patients by dietitians varied from those of normal weight in three dimensions: instrumental avoidance (e.g., shorter sessions), professional avoidance (e.g., less energy/effort) and interpersonal avoidance (negative tone, evasive verbal and body language). Further, Hebl and Xu (2001) reported that primary care physicians spent less time with larger patients.

S. M. Phelan et al. (2015) conducted a narrative review of existing empirical evidence (81 papers) regarding the impact of obesity stigma on healthcare quality and outcomes. The review was constrained by the essentialist assumptions of the included studies as well as the “hypothesised pathways” the authors constructed to explain weight stigma in healthcare. However, it does provide a broader perspective of the literature. The authors argued that:

There is considerable evidence that [weight stigmatising] attitudes influence person-perceptions, judgment, interpersonal behaviour and decision-making. These attitudes may impact the care [health professionals] provide. Experiences of, or expectations for, poor treatment may cause stress and avoidance of care, mistrust of doctors and poor adherence among patients with obesity. Stigma can reduce the quality of care for patients with obesity despite the best intentions of healthcare providers to provide high-quality care. (p. 319)

### **Effects of weight stigma.**

Weight stigma has sometimes been thought to have a positive effect on people by motivating weight loss behaviours (Ogden, 2013). While this belief is not widespread in academic or scientific discourse, public health campaigns frequently use weight stigma to promote weight loss (Abu-Odeh, 2014; Austin, 1999; Hartlev, 2014). In contrast, authors such as Puhl and Heuer (2010) have argued that using weight stigma to motivate weight loss has consistently been shown to be ineffective. Further, Brewis (2014) argued that a pervasive environment of stigma might reinforce or promote weight gain. She offered four mechanisms as explanation: change in behaviour

in response to feeling judged, reduction in socioeconomic status resulting from social stigma, psychosocial stress and structural effects of discrimination. In further support of these arguments, an empirical study in the United States reported a positive relationship between weight discrimination and likelihood of becoming obese (Sutin & Terracciano, 2013), and Carels et al. (2009) reported that weight stigma may reduce the ability of treatment-seeking adults to complete weight loss measures.

Furthermore, a number of authors have argued that participation in what are considered to be “healthy behaviours” is negatively affected by weight stigma. For example, Vartanian and Novak (2011) reported that weight stigma negatively influences motivation to exercise. In earlier work, Vartanian and Shaprow (2008) reported that a negative influence on exercise motivation occurs even when controlling for BMI and body dissatisfaction. Another study reported that after reading about weight stigma in a newspaper article, women who were overweight were more likely to display more disordered (over)eating (Major, Hunger, Bunyan, & Miller, 2014). Ashmore, Friedman, Reichmann and Musante (2008) reported that weight stigma predicted binge eating behaviours. More generally, fear of being stigmatised has been claimed to reduce the healthcare seeking behaviours of overweight women (Amy, Aalborg, Lyons, & Keranen, 2006) and people who are obese (Drury & Louis, 2002). Further, a survey of 600 adults showed that patients who feel judged about their weight have lower trust in their primary healthcare providers (Gudzune, Bennett, Cooper, & Bleich, 2014). Another study found that people avoid healthcare appointments for fear of weight stigma (Drury & Louis, 2002). Consistent with the post-structuralist understandings of stigma and power outlined earlier in this chapter these studies indicate that people discipline their own bodies (e.g., more disordered eating) or resist this discipline (e.g., avoiding healthcare appointments, exercising less).

There is now considerable literature regarding the harmful effects of weight stigma on people’s health. Puhl and King (2013) summarised negative psychological outcomes as including depression, anxiety, low self-esteem and suicidal ideation. Interestingly, one study reported that more subtle forms of weight stigma had a greater perceived impact on health and social wellbeing than explicit weight stigma (Lewis et al., 2011). In a systematic review by Sikorski, Luppia, Luck and Riedel-Heller (2015), the authors looked at 46 studies and reported a direct relationship between weight stigma and increased psychological risk factors. Physical health outcomes related to weight stigma have been less studied, although Himmelstein, Incollingo Belsky and Tomiyama (2015) reported that people exposed to this type of stigma had increased cortisol levels that have, in turn, been linked to deleterious physical health outcomes such as high blood pressure and diabetes. A study by Sutin, Stephan and Terracciano (2015) claimed that weight discrimination is associated with higher mortality rates even when controlling for physical and psychological risk factors. These

findings of physical and psychological effects fit with Goffman's theories of the embodied effects of stigma (Hannem, 2012).

While little research has focused on the topic, it is also relevant to note that emotions of those that do the stigmatising are involved in weight stigma. Two studies of interpersonal (social) stigma reported that people feel disgust towards those who are overweight and that this emotion was a strong predictor of negative attitudes (Vartanian, 2010a; Vartanian, Thomas, & Vanman, 2013). Other studies claimed that contempt was another emotion commonly felt towards people who are overweight (Vartanian et al., 2013; Wirtz, van der Pligt, & Doosje, 2015). However, contempt was not reported to be a strong predictor of negative attitudes (Vartanian et al., 2013). At a societal or political level (structural stigma), a number of authors have discussed the "moral panic" surrounding obesity (Fraser, Maher, & Wright, 2010; Gard & Wright, 2005; S. Murray, 2008). Gard and Wright (2005) wrote that discussing the framing of obesity as a "disease of epidemic proportions provides a context for the creation of a widespread anxiety" (p. 174). I return to this concept in the next section.

To summarise this section, I have discussed that weight stigma is consistently claimed to be prevalent and intensifying in current times across (particularly Western) countries. Furthermore, while physiotherapy has been little explored, this stigma is reportedly common among similar healthcare workers. While less literature exists on behaviour, stigmatising attitudes appear to be related to prejudiced behaviours. Additionally, I have discussed that many studies argue that weight stigma has negative psychological and physical effects on people.

However, I have not yet explored why this type of stigma might be intensifying. I consider this question in the next section by examining the discourses that underpin current perceptions of fatness. Earlier in this chapter I discussed that Foucault saw behaviour and attitudes as socially produced through discourses (Foucault, 1972). I argued that as a result stigma could also be seen as manufactured through discourses (Hannem, 2012). Using this perspective, understanding the discourses that construct dominant (stigmatising) ways of viewing weight can help us understand why weight stigma is prevalent and provide possible options for resisting and rethinking these attitudes.

### **Production of weight stigma through discourse**

A discourse can be defined as a distinct way of thinking or talking about a topic (Foucault, 1972). Foucault saw discourses as constitutive of reality, that is, the ways of thinking or talking that are dominant in a society make certain ways of being (and in a healthcare context *practising*) more likely (Foucault, 1972). In this section I present a critical perspective of hegemonic discourses surrounding body weight. The familiarity in both science and popular media of these dominant discourses on fatness gives an indication of the current cultural salience of fatness. I summarise

these familiar discourses in the following three points, and include a discussion of the less heard (hidden) discourses that present possibilities for other ways of considering weight.

### **The “diet versus exercise causes fatness” discourse.**

A number of authors have argued that one of the most pervasive weight discourses in current times, including within biomedicine, is that diet and exercise are the main causes of weight (Campos, Saguy, Ernsberger, Oliver, & Gaesser, 2006; Gard, 2010; Gard & Wright, 2005; Lupton, 2012a, 2014; McAllister et al., 2009; S. Murray, 2008). Here the body is viewed biomechanically (i.e., in a machine-like manner) as a closed system that involves a fairly simple equation of adding energy in the form of food and taking out energy via exercise or activity (the energy in/energy out model). By extension, weight is seen as individually controllable, where people often blame (or congratulate) others for the amount of body fat they perceive them to have. While diet and exercise undoubtedly have some effect on body weight, this relationship is not as clear or simple as put forward in many biomedical and popular discussions (Gard & Wright, 2005).

In the past two decades, the diet and exercise discourse has been challenged by many sources (Gard, 2010). For example, Blair and Brodney (1999) called into question exercise for the prevention or treatment of obesity, and Sui et al. (2012) claimed that activity levels have little effect on longitudinal BMI patterns. Cochrane studies echo this sentiment with reviews reporting that exercise (K. Shaw, Gennat, O'Rourke, & Del Mar, 2006) and diet (Norris, 2005) show little effect, if any, on reducing fatness. Interestingly, in a reversal of the diet-causes-fatness discourse, some researchers have argued that dieting has caused a widespread increase in body fat (Macpherson-Sánchez, 2015).

There are other discourses that are less acknowledged (hidden). For example, a number of authors have argued for a shift of focus from diet and exercise as causes of weight, highlighting other possible determinants of weight. These factors include, but are not limited to: psychosocial stress, sleep duration, foetal or postnatal factors, medications, micro-organisms, increasing maternal age, greater fecundity among people with higher adiposity, assortative mating, endocrine disruptors and reduction in variation of ambient temperatures (Eisenmann, 2006; McAllister et al., 2009). Despite these other possible determinants and the now almost unquestionable critique of the energy in/energy out model, the diet and exercise discourse continues to be by far the most dominant discourse when discussing the causes of weight in most contexts (Gard & Wright, 2005). Some authors have posited that the reason this discourse remains dominant is due to an underlying moral agenda (Gard & Wright, 2005; Lupton, 2012a; S. Murray, 2008). Given the arguments I presented earlier in this chapter regarding the influence of the current sociopolitical environment that focuses on individual (rather than, for example, state or societal) responsibility for health, this persistence of discourses that focus on individually controllable causes is perhaps not surprising. I would also

argue that a body that is seen as controllable also suits prevailing (bio)mechanistic perspectives that are predominant in biomedicine, and in this way is likely to be relevant to understanding the physiotherapy–weight nexus.

### **The “fatness as illness” discourse.**

Also potentially relevant to physiotherapy and weight is the widespread discourse that constructs fatness as always implying ill-health and a resultant medicalisation of fatness. I discuss here two main elements of this discourse: that fat is seen as necessarily unhealthy, and that fatness is an epidemic.

*Fatness as necessarily unhealthy.* Recent classifications of obesity as a disease, most notably by the American Medical Association in June 2013 (ABC News, 2013), highlight the level of acceptance of equating disease and obesity (D. Allison et al., 2008; Puhl & Liu, 2015). I am not suggesting that there is no interaction between degree of fatness and health. However, like others, I argue that this discourse persists despite considerable research suggesting that the relationship is more complex than often stated (Campos et al., 2006; Gard & Wright, 2005). While many well-cited studies have found a relationship between fatness and health, other significant studies directly contradict these findings, yet receive little attention (Gard & Wright, 2005). I am not attempting to claim that these other studies provide an alternative truth about weight, rather, I highlight them to destabilise the strong hold of the dominant discourses that equate disease and obesity. For example, in a systematic review including 2.88 million people, Flegal, Kit, Orpana and Graubard (2013) reported that overweight people (by BMI category: 25–30) live longer than “normal” weight people (BMI 20–25), and moderately obese people (BMI 30–35) have the same mortality rate as “normal” weight people. Furthermore, a retrospective cohort study conducted over two decades on 2 million people claimed that the incidence of dementia decreased with each increase in BMI category (Qizilbash et al., 2015). The authors reported that people who were very obese in midlife were 29% less likely to develop dementia than those of normal weight. The consistent conflation of fatness with ill-health obscures these more hidden discourses that suggest that many overweight and obese people are at least as well as their normal weight counterparts (Finklestein, 2014).

*There is an obesity epidemic.* There is a persistent discourse about obesity as an “epidemic”, and the term is widely used in both popular and scientific discussions (Gard, 2010; Gard & Wright, 2005). Arguably this term can be critiqued immediately on the basis of semantics. The term *epidemic* usually refers a contagious disease rather than a risk factor. Semantics aside, the phrase *obesity epidemic* is generally used to indicate that there has been a dramatic epidemiological increase in the body weight of the population. Yet, even this view of the “obesity epidemic” as a statistical phenomenon (rather than an infectious one) has been challenged as hyperbole by a number of authors. Many factors have been implicated in this reported distortion of data



presentation. For example, in 1998 there was a change in cut-off points of the BMI categories, where the point that distinguished the “overweight” from “normal weight” changed from a BMI of 27 to a BMI of 25. Guthman (2013) argued that several million Americans become “overweight” overnight if this change in BMI category boundaries is not taken into account when reporting data over this timeframe. Another example, highlighted by Gard and Wright (2005), is that the lack of clear distinction between people who are overweight and obese (by BMI category) has often inflated obesity figures by including people who are overweight. As a result of these criticisms, there is a growing number of voices refuting the notion of an “obesity epidemic”, arguing that this term both exaggerates and over-medicalises increased body weights (e.g., Campos et al., 2006; Gard & Wright, 2005; Rail, 2012). Gard and Wright (2005) argued that it is important to consider the effects this “obesity epidemic” has in terms of what types of practices, interventions or policies it promotes. T. Brown (2014) discussed the increase of stigma associated with use of disease metaphors for the “spread” of fatness, saying that using words such as *contagion*, *disease* and *epidemic* perpetuate the pathologisation of the large body.

### **The “fatness is not normal” discourse.**

When people are measured and compared against a “normal” BMI it is argued that those who do not fit into this category are constructed as “abnormal” (Guthman, 2013). So too, if obesity is seen as an illness, people who are considered fat are constantly judged against “normal” ideals when intake of food quantities are checked, “ideal” levels of exercise are prescribed, weight is measured, and waist circumference or skin folds are taken. A truth about what is “normal” is created where one of the results, as Hannem (2012) posited, is stigma. As I argued earlier in this chapter, according to a Foucauldian perspective, this establishes the conditions for power to be exercised in the disciplining of bodies. Drawing on Foucault, other authors have written on the moral agenda around weight and why fat is so reviled in the current sociopolitical context (Gard, 2010, 2011; Jutel, 2001; Lupton, 2012a). Just as I argued in relation to stigma more generally, these authors point to a society that reveres individual restraint and control, which results in blame being placed on the individual and the individual’s responsibility for self-monitoring and health surveillance (Finerman & Bennett, 1994). Here, theories on the social nature of stigma are evidenced in the idealised norm of thinness in the media (Heuer, McClure, & Puhl, 2011), the growth of health industries around size control, and public health campaigns focusing on individual responsibility (Rhode, 2008). These pervasive social norms are likely to influence physiotherapist–patient interactions, and perhaps in quite particular ways. I will return to this concept later when I discuss physiotherapists and normality in Chapter 3.

## **Reducing weight stigma**

Leading organisations such as The Obesity Society (2010) and prominent researchers such as Puhl and Brownell (2006) recommend systematic efforts to reduce weight stigma, including amongst health professionals. In the past decade or so some research efforts have been specifically directed towards reducing weight stigma. Most studies on the topic to date have been considered in two reviews. Daníelsdóttir, O'Brien and Ciao (2010) reviewed 16 published studies on fat stigma reduction. They concluded that while some interventions showed changed beliefs about causes of fatness, this was not often accompanied by changes in attitudes or behaviours. They suggested that new approaches to changing weight stigma should be investigated. A more recent meta-analysis by Lee, Ata and Brannick (2014) showed that although more studies had been done, they tended to focus on similar causes and had little success in reducing weight stigma. Both reviews called for more field-based studies to allow for assessment of real-world efficacy of attitude changes. Lee et al. (2014) also called for a focus that went beyond cognitive and affective outcomes to also consider behaviour change. Other studies agree that reducing weight stigma will likely require a multilevel approach (MacKean, & GermAnn, 2013; Ramos Salas, Forhan, & Sharma, 2014). Interventions to reduce weight stigma are covered in greater depth in the manuscript in Chapter 7 where I discuss the theoretical underpinnings of an intervention that I developed.

## **Conclusion**

This chapter gave theoretical and empirical insight into the nature of weight stigma. Like other forms of stigma, weight stigma is fleshy, embodied and felt. Weight stigma plays out in social interactions, and is constructed differently in various environments depending on the contextual interplay of social, political, cultural and historical factors. Weight stigma is intensified in current times, due to prevailing sociopolitical circumstances such as individualism, economic rationalism and increasing medicalisation. In this context, dominant discourses construct fatness as a costly illness that the individual is to be blamed for. While weight stigma in physiotherapy has received little direct attention, this form of stigma is claimed to play out in discriminatory behaviours that may limit people's life choices in a number of ways, including having a negative impact on health. In the next chapter, I use these theoretical understandings of weight stigma to investigate how the particular context of physiotherapy might foreground certain elements of stigma. Considering this, I discuss the preparedness of the profession to enter into weight-related interaction

### Chapter 3: Physiotherapy

*It is the custom, at least in our European society, to consider that power is localised in the hands of the government and that it is exercised through a certain number of particular institutions, such as the police or the army. One knows that all these institutions are made to transmit and apply orders and punish those that do not obey. But I believe that political power also exercises itself through ... institutions that look as if they have nothing in common with political power and look as if they are independent of it, but in fact are not.*

Foucault, 1971

Drawing from the understandings of fatness and stigma explored in the previous chapter, I now turn to focus on the profession of physiotherapy. Literature regarding weight stigma in health demands questions such as: What role does the body play in physiotherapy that might be relevant to weight? Are the dominant weight discourses outlined in the previous chapter likely to be reproduced, or does this profession have its own weight discourses? In what way might power (as suggested by the epigraph from Foucault above) be involved in interactions that involve weight? What is already known about weight stigma in physiotherapy?

To explore these questions, I consider the particular nuances of the profession to determine what might be relevant to weight and potential stigma. I examine physiotherapy reflexively, drawing in particular from critical physiotherapy literature to consider the ontological and epistemological underpinnings of the profession. Further, I look at seemingly mundane everyday clinical practices and discuss their relevance to the research topic. Finally, I look at the literature to date on the physiotherapy–weight nexus and propose new areas to explore in the empirical work of this thesis. First, however, I provide some context for my exploration of physiotherapy by presenting a definition and discussing the domains physiotherapy works in. In this overview I also argue that the profession has a significant presence globally and affects the lives of many people.

#### **What is physiotherapy?**

There are two ways in which the noun *physiotherapy* is commonly used. First, it is used to describe physiotherapy techniques, such as in the sentence “I am doing physiotherapy”, which may mean something like, “I am doing some exercises for my knee”. Here it is possible for a number of people to carry out this physiotherapy, for example: people who have injuries, their family, healthcare professionals and traditional healers. However, this type of “physiotherapy” is not the focus of this thesis. In this research, I use the word *physiotherapy* in its other commonly used context: as a noun

describing a profession. Here the noun describes a group of individuals that the state (or similar) deems to have gained a certain amount of knowledge. These individuals are regulated to provide a certain kind of healthcare (Owen, 2014) and are permitted to use the title of “physiotherapist” or, in some countries, “physical therapist” (Higgs et al., 2001). This “profession of physiotherapy” is not a static phenomenon, but rather a dynamic entity that adapts in response to local and global prevailing political, economic and historical demands and nuances (Owen, 2014). I focus on the present day version(s) of physiotherapy as a profession and, while most literature on the profession is Eurocentric, I consider international sociocultural differences where possible.

### **What is the domain of physiotherapy?**

The physiotherapy profession demonstrates many similarities across the world, despite some local variations (Higgs et al., 2001; Physical therapy: a global profile, 2015a; Physical therapy: a global profile, 2015b). Similarities are reflected in the consistency evident in the self-definitions of professional bodies on their official websites. For example, the Australian Physiotherapy Association (2015) defines physiotherapy as “a healthcare profession that assesses, diagnoses, treats and works to prevent disease and disability through physical means”. The physical focus of the Australian association is echoed by the Nigerian Physiotherapy Association (2015), which uses the following definition: “Physiotherapy is a health care profession which involves evaluation of patients through the administration of physical tests to determine the presence and/or extent of an injury prior to the use of physical modalities for preventive and therapeutic purposes”. The Chartered Society of Physiotherapy in the United Kingdom (2015) provides a similar, but somewhat broader, definition of physiotherapy as a profession that helps “people affected by injury, illness or disability through movement and exercise, manual therapy, education and advice”. While seemingly an obvious point, it is interesting to note the repetition in these definitions of words such as *physical*, *exercise*, *manual* and *injury*. I argue that these words reveal an underlying institutionalised assumption in physiotherapy that physical issues necessarily demand physical tests and physical treatments. I return to unpack and problematise this assumption in a number of ways throughout the remainder of the thesis and argue that it is a key issue that exploring the physiotherapy–weight nexus exposes in the profession.

However, many physiotherapists would argue that this physical focus is changing. Certainly, in recent times there have been signs of a shift away from a purely physical approach in some specialities (M. Jones, Edwards, & Gifford, 2002). For example, there is growing awareness that conditions such as pain may also have psychological or social origins (O'Sullivan, 2012). Perhaps owing to its newness to physiotherapy thinking, the bio-psychosocial approach is rarely evident in definitions of the profession and is usually given less priority than purely physical aspects. For example, the World Confederation for Physical Therapists’ (WCPT) website definition has a

physical focus in its first paragraph, similar to the definitions presented above. It is not until the second paragraph that a more bio-psychosocial scope is described: “physical therapists help people maximise their quality of life, looking at physical, psychological, emotional and social wellbeing” (World Confederation for Physical Therapy, 2015). Relevant to my thesis, and considerations of weight stigma, is the notable absence in these definitions of any of the cultural, political, historical or philosophical factors involved in physical health.

### **Significance and impact of physiotherapy.**

Physiotherapy is an increasingly regular source of health contact for people (Australian Physiotherapy Association, 2015) and one of the largest allied health professions globally, with over 26,000 practising professionals in Australia alone (Physiotherapy Board of Australia, 2015). While there are no global figures available, the WCPT estimated that it had more than doubled its membership in the two decades after 1993, with 378,667 members in 2013, with the Asia-Pacific region representing the largest growth in health professionals (Physical therapy: a global profile, 2015a). The figure is likely to be a substantial underestimate of global figures, particularly due to unknown numbers in lower and middle income countries and small island nations (Sykes, 2015). The number of physiotherapists per capita is generally higher in wealthier countries. For example, there are more than 20 therapists per 10,000 people in some Scandinavian countries, whereas the ratio is less than 1 per 10,000 in most African countries (Physical therapy: a global profile, 2015b).

There are no global or national figures on how many people are patients of physiotherapists. However, many people (particularly in middle or higher income countries) use physiotherapists at some point in their lives, as physiotherapists work in a variety of settings including community-based rehabilitation programs, hospitals, education and research centres, private offices, residential care facilities, sports centres/clubs, workplaces/companies, individual homes, prisons and schools (WCPT, 2015). Physiotherapists also work in a range of sub-disciplines including neurology, cardiorespiratory, musculoskeletal, orthopaedics, sports, paediatrics and aged care (WCPT, 2015). In comparison to many other health professionals, the amount of time that physiotherapists work with people is typically somewhat extended, and it is common for them to see the same patient on many occasions. As a result, some people spend considerable time “in physiotherapy”.

While the emergence of physiotherapy as a profession was a process rather than a specific incident, Nicholls and Cheek (2006) proposed a possible beginning in 1894 in the United Kingdom. They discussed physiotherapy at this time as an exclusively female profession that broke away from the “seedy” association of massage with prostitution by strategically aligning itself with medicine. Since then, physiotherapy has gone through a process of increasing professionalisation. Entrance to the profession now requires a university degree or similar in most countries (Owen, 2014). Physiotherapy’s traditional subservience to medicine is declining, with a trend towards direct access

(not needing a doctor's referral) and autonomous practice consisting of independent assessment, diagnosis and treatment (Physical therapy: a global profile, 2015b). With this independence, the profession is gaining more respect and power, both within health and in the eyes of the general public (Higgs et al., 2001; Owen, 2014).

### **Theoretical perspectives on physiotherapy**

Beyond the relatively descriptive definitions of the profession outlined above, theoretical and philosophical investigations of physiotherapy are scarce, and some authors argue that the profession lacks self-analysis (Wikstrom-Grotell & Eriksson, 2012), reflexivity (Trede, 2012) and acknowledgement of its historical and sociopolitical context (J. Shaw & DeForge, 2012). This lack of theoretical groundwork makes in-depth analysis of the profession from these perspectives challenging (and exciting!).

A small but growing number of authors have begun to investigate the philosophical underpinnings of physiotherapy and how the profession is constituted. In this section I draw mainly upon the work of these critical physiotherapy scholars (and at times critical health literature from related fields) to discuss elements of the profession that could be relevant to weight and its associated stigma. Here I investigate the meaning of the epigraph that opens this chapter. That is, I consider how power and governance might play out in physiotherapy, an institution that has not been traditionally thought of as a site of political power. I then deconstruct physiotherapy to make visible the elements of the profession that can render weight stigma possible, salient and consequential. I introduce these topics under four sub-headings that highlight some issues that drive reflexive theoretical enquiry within the profession: *positivism*; *bodies, visibility and normality*; *proximity and power*; and *professional reflexivity*.

#### **Positivism.**

Praestegaard and Gard (2013) contended that while physiotherapy practice is arguably grounded in both humanistic and scientific paradigms, the profession generally focuses on the biomedical scientific perspective. That is, physiotherapy's intellectual foundations rest in the belief that there is a single objective answer to any question (a positivist theoretical perspective, see Crotty, 1998). Parry (1995) argued that the adoption of this orthodox "medical model" dates back to gender-related historical constraints on the women who founded the profession and who were willing to "trade autonomy for orthodoxy, to carry out ancillary and subordinate tasks ... in exchange for recognition and patronage" (p. 310). Today, this positivist way of thinking is evident in that randomised controlled trials and systematic reviews are upheld as "gold standards" in the profession, to the marginalisation of other methodologies (Crosbie, 2013; Richardson & Lindquist, 2010). Orthodox biomedical approaches are also reflected in the physical focus of the professional

definitions discussed earlier in this chapter. By highlighting this emphasis, I am not suggesting that positivistic scientific perspectives are unimportant. Rather, like others, I propose that this type of science can only address some of the phenomena physiotherapists deal with, while also having some potentially negative consequences (Bjorbaekmo & Engelsrud, 2011; Eisenberg, 2012).

For example, Bolam and Chamberlain (2003) argued that positivism positions the health professional as the powerful “expert”. Further, other authors have suggested that expert positioning can have implications for the patient-centered practice model that is generally accepted in physiotherapy, as in other health professions, as the preferred and most ethical way to practice (Trede, 2006; Trede & Higgs, 2003; Wikstrom-Grotell & Eriksson, 2012). Recent literature indicates that physiotherapy practice is, however, often primarily *practitioner*-centred, where the physiotherapist often controls the direction, content and definition of “truths” in their interactions with patients (Bjorbaekmo & Engelsrud, 2011; Chester, Robinson, & Roberts, 2014; Hiller, Guillemin, & Delany, 2015; Praestegaard et al., 2015). Bjorbaekmo and Engelsrud (2011) argued that an “expert” perspective can be noted in extensive “testing” of children with disabilities. Using a phenomenological approach, the authors suggested that such testing transmitted the physiotherapists’ views of what was “important, correct or admirable” (p. 123), which could result in insecurity and lack of confidence of the patient in themselves. In a Foucauldian analysis of Danish physiotherapy practice, Praestegaard et al. (2015) argued that when patients resisted physiotherapists’ “regimes of truth” (p. 22), including those about body size, they were met with stigma and judgement from physiotherapists:

These patients resisted the physiotherapists’ understandings and descriptions of body image, self-care and medicalization of the body. This means that the patients do not accept the premise for physiotherapeutic treatment, and even worse, they defy by not obeying. Accordingly, the physiotherapists meet these patients with judgmental and stigmatizing attitudes. Patients, who are not able to live in the politically defined, normative “healthy” way, are disapproved as they are regarded as not taking active responsibility for their own life ... (p. 22)

A number of authors have argued that practitioner-centred communication can have particular consequences when working with people who have experienced stigma (L. Jones & Watson, 2009; Saha, Arbelaez, & Cooper, 2003; Teal & Street, 2009; Watson & Gallois, 1998). Although the authors in one study argued that collaborative or patient-centred communication could help to address stigma associated with low back pain (Synnott et al., 2015), the effects of this style of communication with regards to stigma have not yet been explored in much detail in a

physiotherapy context. I consider the positioning of the physiotherapist and the patient in clinical interactions in my empirical work, particularly in the study presented in Chapter 5.

Another possible negative consequence of having a positivist perspective is that the health professional is often established as a scientific or “objective” observer, assumed to be free from subjective observations or moral judgements (Lupton, 2012b). Patton and Nicholls (2014) have argued that assumed objectivity or neutrality is likely to obscure the need for critical examination of the beliefs underlying healthcare practice. In particular, the social, cultural, power and political elements of practice may not be attended to (Eisenberg, 2012; Jorgensen, 2000). Patton and Nicholls (2014) posited that lack of attention to these elements might result in health professionals having difficulty observing judgement or stigma in their own attitudes or behaviour. Considering these perspectives, I am interested in investigating whether physiotherapists neglect elements of weight-related interactions I highlighted in Chapter 2. That is, can physiotherapists take into account that fat bodies can potentially be assigned social, cultural and economic/political value? Or, as Nicholls and Gibson (2010) argued, are these aspects overlooked as confounding factors when employing a predominantly positivist perspective?

I want to be careful to clarify that I am not suggesting that positivism necessarily leads to behaviours such as practitioner-centred practice or positioning the therapist as an “expert”, nor that these ways of working necessarily lead to less ethical practices. Rather, I wish to argue that in relation to the physiotherapy–weight nexus it is important to consider the potential issues of power involved in positivism, which can be evident in some of the clinical expressions of this particular way of viewing the world.

### **Bodies, visibility and normality.**

The body is clearly central to practice in physiotherapy. Reflecting on the vignette I presented at the start of Chapter 1, physiotherapy involves closely observing bodies, touching bodies and partial undress of the body. In clinical settings physiotherapists commonly comment on, assess, move and/or lift bodies or body parts. Furthermore, they ask patients to be aware of their own bodies, so that patients can learn about and potentially change their postural or movement habits. This can involve physiotherapists encouraging patients to give visual attention to their bodies by observing themselves in mirrors or video recordings. Clinical interactions are frequently about two (or more) bodies interacting in a close and intimate way. They are about the fleshy reality of bodies at least as much as about thinking about the vector a muscle exerts on a bone or the number of millimetres a joint moves. The corporeal presence of bodies is thus a routine and integral part of physiotherapy. The body is there, present, and attended to.

Considering the embodied elements of Goffman’s work on stigma outlined in Chapter 2 (Goffman, 1963), this salience of bodies in physiotherapy is likely to be relevant to the



physiotherapy–weight nexus. Further, in Chapter 2 I argued that the body is particularly salient in situations involving weight stigma, as fatness is a highly visible and physical characteristic (Goffman called this characteristic of stigma *discoverability*). Many authors who have discussed visibility or discoverability have done so in a largely essentialist way. That is, they talk about a characteristic as being innately discoverable regardless of its context. For example, skin colour and weight are discussed as highly visible, in contrast to characteristics such as HIV or mental health status (Hogg & Cooper, 2003). For my research, I argue that it would be useful to extend these ideas to consider the effect of particular contexts on the visibility of fatness. For example, fatness is less visible when someone is sitting at a desk than in a physiotherapy context. Hence, while a physiotherapist might ostensibly focus on observing the movement of a joint (such as in the vignette at the beginning of this thesis), other elements of what they are doing have implications for visibility. For instance, the fatness of a body is likely to be more obvious because the physiotherapist may have removed clothing from the body, be touching the body and be looking closely at the body. Increased visibility of this stigmatised attribute could have a number of effects on the consultation. While this has not yet been investigated in a physiotherapy context, Russell and Carryer (2013) discussed the experience of women who are overweight visiting general physicians, where many participants spoke of delaying or avoiding hands-on examinations for fear of humiliation associated with body exposure. In physiotherapy too, rolls of fat can become acutely exposed, touched, and under the gaze in ways that are rare in many other healthcare environments (e.g., dentistry or psychology) or most day-to-day interactions. As a result, regardless of what the therapist is actually thinking, fatness may become a particularly salient issue.

Despite the integral involvement of the body in physiotherapy, little attention has been given to how the body is constructed, viewed and managed by the profession (Nicholls & Gibson, 2010; Wikstrom-Grotell & Eriksson, 2012). This is not unexpected when considering the focus of the definitions of the profession presented earlier in this chapter and the positivist theoretical perspective that underpins much of the thinking in the profession. Congruent with the profession's ontology, Nicholls and Gibson (2010) argued that physiotherapists generally attend to the body in a biomechanical (or “machine-like”) way. For example, physiotherapy research and clinical work has given much focus to the length of muscles, joint range of movement, what type of exercises to prescribe for a particular condition and physical function (Jorgensen, 2000; Thornquist, 1994). As I discuss in more detail below, the physiotherapy–weight nexus appears to have followed a similar machine-like trajectory: a physiotherapist might measure BMI, prescribe exercise and diet for weight management, or discuss the importance of weight management for joint or respiratory health. However, there are many other possible understandings of bodies that physiotherapy marginalises, such as the person's lived experiences of their body in health and illness, and the

social, cultural or political aspects of bodies (Jorgensen, 2000; Nicholls & Gibson, 2010; Thornquist, 2006). Thornquist (2006) argued that the priority physiotherapists ascribe to various understandings of the body has important implications for clinical practice.

Using a Bourdieusian approach, Gibson and Teachman (2012) built on theories highlighting the biomechanical focus of the profession, arguing that physiotherapists put considerable effort into establishing what a “normal” body is. This effort can be seen in studies such as the *1000 Norms Project*, which aims to establish for physiotherapists what a “normal” range is in “healthy” humans in the areas of dexterity, balance, ambulation, joint range of motion, strength, endurance and motor planning (McKay et al., 2015). As I argued in Chapter 2, when looking at power from a Foucauldian perspective, who constructs what constitutes “normal” is very important, as they then have the power to decide what or who needs intervention (disciplining) to become more “normal”. As discussed by Nicholls and Gibson (2010), having a construction of a “normal” body in physiotherapy necessarily means that an “abnormal” or “deviant” body is also established. Further, Nicholls and Cheek (2006) suggested that when physiotherapy seeks a normatively functioning body it “disciplines” bodies that are “abnormal”. Gibson and Teachman (2012) used the example of a rehabilitation setting for children with cerebral palsy to demonstrate how reproduction of dominant notions of the value of walking can be used to discipline bodies that are considered abnormal. These authors argued that notions of normality and disability could contribute to negative self-identities for these children and their families. I suggest that it is possible that physiotherapists apply this same thinking, in keeping with the “fatness is not normal” discourse outlined in Chapter 2, to people who are overweight; seeing their bodies as not normal and requiring discipline.

### **Proximity and power.**

There is little literature directly about proximity and power in physiotherapy. In contrast to the Foucauldian treatment of power in this thesis, most of this literature has a hierarchical conceptualisation of power. For example, physiotherapy interactions, like those of a number of other healthcare professionals, have been conceptualised as characterised by emotional and physical contact between the health professional and patient in circumstances where the patient is physically or emotionally vulnerable (Eisenberg, 2012). Eisenberg argued that this proximity has the potential to result in asymmetrical power encounters, with the patient having less power than the physiotherapist. Awareness of potential power differentials such as these forms the basis of policies that seek to prevent a misuse of power, for example penalties for physiotherapists who have sexual relationships with their patients (I. Cooper & Jenkins, 2007). Power differences in relationships between clinicians and patients who are overweight can result in a higher level of perceived importance and consequence to any perceived judgements, prejudiced behaviours or stigmatising attitudes (Teal & Street, 2009). Thus, while this power difference exists, the physiotherapist

arguably has a different level of responsibility to manage their attitudes and behaviours than in situations where the power relationship is more symmetrical. In discussing power in physiotherapy interactions, Eisenberg (2012) argued that it is possible for therapists and patients to share power. Yet to date, research demonstrates that this is more the exception than the rule (Chester et al., 2014; Hiller et al., 2015). Researchers from other health professions suggest that fostering more shared power interactions in clinical practice can be valuable to reduce the feelings of blame and stigma that people who are overweight often perceive in interactions with health professionals (MacKean & GermAnn, 2013). In my empirical research outlined in Chapters 5 to 7, I investigate in what way considerations of power in clinical interactions are relevant to the physiotherapy–weight nexus.

### **Professional reflexivity.**

Considering the potential issues I have outlined associated with positivism, the understandings of bodies, and proximity in physiotherapy, I suggest it is concerning that authors have highlighted a lack of reflexive practice within the profession (J. Shaw & DeForge, 2012). Clouder (2000) has argued that this lack can be seen at an individual level where, unlike some other healthcare professions, reflexivity is not an established part of the practice and education of clinical physiotherapists. In some cases clinical *self-reflection* is encouraged (Patton, Higgs & Smith, 2013) and has been taken up institutionally (Frith, Cowan & Delany, 2015; Rowe, 2012). However, in discussing interviews and workshops with physiotherapists on the topic of self-reflection, Clouder highlighted that while participants often demonstrated the ability to reflect on the technicalities of practice (such as the success of treatment techniques), they found it difficult to consider their own subjectivity: “the clinician her/himself did not appear to be part of the reflective frame of reference. Even though self-awareness was clearly identified as important, there was without exception, a transfer of attention to the client/patient” (p. 216). That is, while participants could self-reflect, they did not necessarily do this reflexively. Similarly, Trede (2006) maintained that there is little prioritisation of a deeper individual reflexivity, such as consideration of social, philosophical, interpersonal, emotional, embodied or power elements of practice. I suggest (and investigate further in my empirical research presented later) that this could mean that physiotherapists are ill-equipped to recognise and respond to potentially complex or sensitive interactions involving weight stigma.

Some scholars have argued that there is also a lack of theoretical and philosophical reflexivity at the discipline level (Nicholls & Gibson, 2012; Trede, 2012). For example, little attention is given to these factors in physiotherapy education curricula or in academic research (Gibson et al., 2010; M. Jones et al., 2002; Nicholls & Gibson, 2012; Smart & Doody, 2007; Trede, 2006). Without these intellectual resources, the profession is likely to be unaware of its theoretical underpinnings and may struggle to find other ways of thinking about its practice (Nicholls & Gibson, 2012). For example, physiotherapists might be unable to think about the embodied

experiences and social, performative or politicised elements of the physical conditions that patients present with (McPherson, Gibson, & Leplege, 2015). What theoretical resources does such a profession have to be aware of the multiple elements of stigma discussed in the previous chapter? This type of question is largely unanswered in relation to physiotherapy and forms a component of the questions I ask in the empirical work laid out in Chapters 5 to 7.

### **The physiotherapy–weight nexus**

I now shift focus from the reflexive exploration of the physiotherapy profession to the direct intersection between the profession and weight. There has been little empirical exploration of this nexus to date, and almost no theoretical enquiry.

#### **Intensified focus on weight management.**

Over the past two decades physiotherapists have increasingly integrated holistic health advice, in part comprising “healthy lifestyle” messages such as weight management, into their practice (Alexander, Rosenthal, & Evans, 2011; Rea, Marshak, Neish, & Davis, 2004; Snodgrass et al., 2014). For example, it is becoming commonplace for physiotherapy leaders to encourage assimilation of weight management into research and practice (Dripps, 2014; Physiopedia, 2011). This focus is consistent with findings from a Canadian study that employed a modified Delphi process in which participants achieved consensus on recommendations including the assessment of BMI, taking medical history and prescription of exercise in the physiotherapy management of people who are overweight (Alexander et al., 2011). Similarly, in a survey of Australian physiotherapists, Snodgrass et al. (2014) found that over 80% of participants considered weight management to be part of their scope of practice. Interestingly, in the same study, under 20% of the participants reported receiving any formal training in weight management. Black, Marcoux, Stiller, Qu and Gellish (2012) even suggested that physiotherapists should discipline their own bodies to become “role models” for patients by maintaining a “healthy weight”. This focus on fatness seems to follow the pattern of increasing medicalisation of weight described in the last chapter and may be based on the same dominant weight discourses.

Despite this apparent increase in focus, there is very little literature that explores what physiotherapists actually do in their practice with regard to weight management. In a North American study, 61.2% of participating physiotherapists said they felt “obligated to educate people who are obese on the health risks of obesity” (p. 88), 87.2% reported that they frequently or always recommended exercise, and less than 30% said they provided dietary advice or referral (Sack, Radler, Mairella, Touger-Decker, & Khan, 2009). An Australian pilot study showed similar results with 84.6% of physiotherapists saying they provided physical activity advice and 41.5% saying they provided dietary advice (Snodgrass et al., 2014). Physiotherapists in this study also reported using

observation (60.0%) or BMI (47.7%) to determine whether patients were overweight; however, they tended to use weight in kilograms as a monitoring outcome measure. The focus of these two studies was on “lifestyle” and biomedical elements of weight management, with little information about whether physiotherapists incorporate other elements of the determinants of weight into their practice.

Physiotherapy literature often discusses obesity as a contributing factor to disorders that physiotherapists treat, or the effects of weight change on such conditions (e.g., Black et al., 2012; Woolner & Dean, 2013). However, the relevance of body weight to the conditions that physiotherapists often treat is far from unequivocal. While some studies point to a relationship between weight and musculoskeletal conditions (e.g., Jiang et al., 2011; Jiang et al., 2012; Shiri, Karppinen, Leino-Arjas, Solovieva, & Viikari-Juntura, 2010), others claim that this may not be the case. For example, a systematic review of 65 high quality epidemiological studies reported no causal relationship between weight and back pain, and only a possible weak association (Leboeuf-Yde, 2000). Furthermore, in their systematic review of 35 studies about weight reduction as a physiotherapy intervention for low back pain, Woolner and Dean (2013) found no causative effect of being overweight on back pain, and only a very small possible association between weight and pain. Interestingly, the authors still concluded that there is a role for considering body weight “as a contributing factor in the patho-etiology of low back pain [and that] weight monitoring and weight control warrant being [physiotherapy] interventions in back pain management” (Woolner & Dean, 2013, p. 46). Similarly, a meta-analysis of the effect of weight loss on osteoarthritic knee pain demonstrated minimal effect of weight loss on pain scores (Christensen, Bartels, Astrup, & Bliddal, 2007). The nuances of whether (or how much) physiotherapy should focus on weight management have not been explored, particularly not in relation to the possible harmful effects of weight stigma outlined in the previous chapter.

### **Weight stigma in physiotherapy.**

Despite the size and impact of the profession, there has been little discussion about stigma in physiotherapy. What literature exists is limited to studies on the stigma of disability (Cassidy, Reynolds, Naylor, & De Souza, 2011; French, 1994; Gething, 1993; R. Johnson, 1993), mental illness (Probst & Peuskens, 2010; Yildirim, Demirbukan, Balci, & Yurdalan, 2015) and pain (Bunzli, Watkins, Smith, Schütze, & O'Sullivan, 2013; Slade, Molloy, & Keating, 2009; Synnott et al., 2015). Many of these studies highlighted that physiotherapists demonstrated stigma towards people with the attributes outlined above (French, 1994; Gething, 1993; Probst & Peuskens, 2010; Slade et al., 2009; Synnott et al., 2015; Yildirim et al., 2015), often at similar levels to the general population (French, 1994; Gething, 1993; Probst & Peuskens, 2010; Yildirim et al., 2015). Further, some of the studies argued that physiotherapists lacked an understanding of the stigma their patients

might experience (Bunzli et al., 2013; Cassidy et al., 2011). Taken together, I suggest that these studies on stigma indicate a general lack of awareness and attention to stigma in the profession and highlight a need for greater education of physiotherapists in this area. Overall, these studies' findings support the argument I presented earlier in this chapter that physiotherapists may not be well equipped to negotiate issues such as weight stigma.

Apart from my own previous research (Appendix A), in systematic searches I found only one study that investigated weight stigma in qualified physiotherapists, and one that investigated physiotherapy students. In both of these studies attitudinal tests were a secondary focus of the investigations and were embedded within larger research projects looking at practice-based approaches to reducing fatness (weight loss). Both studies used pre-existing explicit attitudes tests and did not test for implicit stigma. Awotidebe and Phillips (2009) found that 97.6% of the participating physiotherapy students stereotyped people described as obese or fat as "lazy, unattractive, insecure and with lower self-esteem" (p. 27). By contrast, Sack et al. (2009) reported that participating qualified physiotherapists had neutral attitudes to people who were described as obese, despite also finding that over 50% of participants believed that people who are obese are awkward, weak-willed, non-compliant and unattractive. These authors explained this conclusion by claiming that participants' negative attitudes in answers to some questions were cancelled out by positive answers towards people who are obese (that they are likeable, warm, pleasant). An alternative interpretation is that these findings fit with the "jolly fat stereotype" (Fiske, Cuddy, Glick, & Xu, 2002; Tiggemann & Rothblum, 1988), which, in fact, suggests that physiotherapists may exhibit weight stigma.

My own previous study (Appendix A) was intended to clarify whether qualified physiotherapists demonstrated weight stigma. In light of the other literature on weight stigma, it seemed likely that physiotherapists would demonstrate this type of stigma shown by other health professionals, physiotherapy students and the general public. However, there was a possibility that some element specific to the profession protected it from these types of attitudes. As my study was the first to focus specifically on this issue I will discuss it in some detail. Further information about the study is available in the form of a published manuscript presented in Appendix A.

I used a survey research methodology (Punch, 2003) that was predominantly quantitative, with a small qualitative component. The online survey had two main sections to investigate implicit and explicit weight stigma separately. As outlined in Chapter 2, these two expressions of weight stigma are influenced by different factors (Brewis & Wutich, 2012; Marini et al., 2013). For example, negative attitudes are not always reflected in explicit measures, as this expression of stigma is often subject to social desirability bias (Roland, 2008). To test explicit stigma, I used a pre-existing attitudes test developed by Crandall (1994). This test investigated elements of

Goffman's symbolic interactionist perspective on stigma that were outlined in Chapter 2 such as stereotypes (e.g., "I tend to think that people who are overweight are a little untrustworthy."), stigmatising social behaviours (e.g., "If I were an employer, I might avoid hiring an overweight person.") and self-stigma (e.g. "I feel disgusted with myself when I gain weight.").

Implicit stigma is difficult to test due to its inherently hidden nature. Consequently, there is considerable disagreement over the value of various methods of testing it (Goodall, 2011; Oswald, Mitchell, Blanton, Jaccard, & Tetlock, 2013). As more commonly used implicit measures, such as Implicit Attitudes Tests, have been critiqued for their lack of ability to predict behaviours (Oswald et al., 2013), I used a series of purpose-built case studies. The cases involved typical clinical physiotherapy scenarios in which weight was manipulated as an independent variable to investigate whether there was stigma in participants' responses to patients of different BMI. I analysed the quantitative data using comparison statistics. The qualitative data was in the form of short text box responses which I analysed, due to the relatively small amount of data produced, with a rudimentary form of thematic and content analysis.

I found that physiotherapists demonstrated both implicit and explicit weight stigmatising attitudes. In the explicit attitudes test, participants showed overtly negative attitudes in three areas: the characterisation of people who were described as overweight as lacking sufficient willpower, an overall dislike of people who are overweight, and a fear of becoming overweight oneself. Similar to the study discussed above by Sack et al. (2009), participating physiotherapists generally agreed with or (re)produced stereotypes of people who are considered overweight. These stereotypes arguably relate to some of the dominant health discourses associated with weight stigma (discussed in Chapter 2). That is, participants saw fatness as: due to a failure to manage individually controllable lifestyle factors, necessarily unhealthy, and "abnormal". Owing to the type of data produced, an attitudes test is not an appropriate way to investigate discourses in any detail or with rigour and this is something I return to investigate in Chapter 6.

In the implicit attitudes tests, no difference was found in the quantitative aspects of the case studies that compared treatment of different sized patients. This may mean that physiotherapists do not treat larger patients any differently to others (I return to explore this further in the studies in Chapters 5 to 7) or it may have been due to the set responses physiotherapists had to the questions I asked in the case study. Implicit weight stigma was, however, demonstrated in qualitative responses in the following ways: negative language was used to discuss fatness, weight was assumed to be individually controllable and the complexity of the causes of body weight was not considered. Owing to the very small amount of data the survey method produced (from a qualitative perspective) this study was not able to provide a rich or nuanced account like most in-depth

qualitative research, but served as a useful precursor to suggest the need for, and direction of, the empirical work of this thesis.

The findings from these earlier studies challenge some ways of thinking that I have argued earlier in this chapter are dominant in the social organisation of the profession such as the positioning of the physiotherapist as an objective observer and the hegemonic “body-as-machine” logic. The studies also encourage a level of reflexivity that I have argued is currently rare in the profession.

However, while the survey approach used in these studies has the advantage of obtaining data that can provide an overview of a topic, it is unsuited to detailed, complex or rich social enquiry (Braun & Clarke, 2013). Further, researchers have been criticised for overusing methods such as surveys in psychology and marginalising other ways of conducting research (Gough & McFadden, 2013). Survey methodology also lacks the ability to engage with participants with reciprocity. When considering the results of these earlier studies it is also important to keep in mind the assumptions underlying the research methodology. In posing research questions such as “Do physiotherapists demonstrate weight stigma?” there is an assumption that stigma is a static phenomenon that is measurable in this way. This assumption contradicts thinking about the socially constructed nature of stigma discussed in Chapter 2. As a result, while this type of research might produce a seemingly concrete answer, it is important to remember that the results can only speak about physiotherapists at that time, and within the particular sociocultural setting in which the study was conducted. Furthermore, such research cannot answer questions about how or why stigma was produced. While this may seem obvious to contemporary critical psychology or critical physiotherapy researchers, who have often highlighted these limitations of positivist research using post-structuralist perspectives, this is not usually reflected upon by those who conduct positivist research themselves (Braun & Clarke, 2013). To address these issues I approach the physiotherapy–weight nexus using different underlying assumptions in the empirical work of this thesis.

In summary, as explained in detail in Chapter 2, weight stigma has been reported extensively in other healthcare professionals, including doctors, nurses, psychologists and dietitians. Considering these studies, and the increasing levels of weight stigma in the general population, it is not surprising that there is now some research reporting that physiotherapists display similar types of stigma. Furthermore, as also outlined in the previous chapter, it is likely that weight stigmatising attitudes lead to discriminatory behaviour. However, it is not clear if, or in what way, these attitudes will have consequences in physiotherapy environments (this gap in understanding is examined in Studies 1 and 2), nor is it clear how to reduce these attitudes (explored in Study 3).



## **Conclusion**

Physiotherapy is a large and growing profession. It predominantly employs a biomedical approach based on a positivist perspective to focus on physical aspects of health-related conditions. To date, scholars have not much problematised or critiqued the profession. However, there are signs of change as critical enquiry into physiotherapy is becoming more common. Together with the theories outlined in Chapter 2, critical perspectives highlight some possibilities for understanding the physiotherapy–weight nexus. I added to the work of other authors in discussing the intensity of the gaze and focus on bodies in physiotherapy, and highlighted how this is likely to increase the visibility of fatness and the salience of weight stigma. I argued that coming from a positivist theoretical standpoint, where the physiotherapist can be seen as an objective “expert”, therapists might not give attention to factors such as their potential for subjective judgement. For example, they may neglect to identify where they perpetuate stigma, or would be perceived as stigmatising. Further, I suggested that therapist-centred practice might make judgement or discrimination particularly salient in this context. I also argued that as physiotherapy has been seen as striving to discipline “abnormal” bodies to be more “normal”, the same thinking could be applied to fat bodies. In line with this, I posited that dialogue advocating for greater disciplining of fat bodies has intensified in physiotherapy recently. Specific investigation of the physiotherapy–weight nexus has been minimal, leaving a considerable gap in understanding, which highlights clear questions that I will address in my empirical research. I now turn to focus on this empirical work, outlining my formulation of research questions and the methods I used to explore this gap in the literature.

## Chapter 4: Research design

In the last two chapters I argued that the physiotherapy–weight nexus is nuanced, and approaches to it that are primarily biomedical are potentially problematic when considering the current prevalence of weight stigma in healthcare. Additionally, I posited that other aspects of the physiotherapy–weight nexus such as the psychological, social, political and cultural factors that can contribute to stigma have received little research attention. To begin to address this lack of research, I conducted three empirical studies, which are presented in Chapters 5 to 7 as published papers (or manuscripts under review). In this chapter I explain the underlying assumptions and methodology of each study. I also outline the rationale for the various design elements and data collection techniques I employed.

### Research reflexivity

Many authors have argued for the importance of a philosophical consideration of, and reflection on, the underlying assumptions behind any research endeavour. For the purposes of this brief outline, I draw substantially from three sources to discuss this: Chamberlain (2014), Crotty (1998) and Braun and Clarke (2013). As Chamberlain argued, data do not exist independently of the way they were collected. He posited that, at least in part, data are *constructed by* the research question, methodology, data collection strategies and other elements of research design.

Study design is always based on some underlying ontology: an understanding of the nature of truth and reality (Crotty, 1998). There are many ways of discussing ontology (Chamberlain, 2014), but most authors describe ontology as a continuum between realism and relativism rather than a dichotomy (e.g., Braun & Clarke, 2013), although even this is debated (Chamberlain, 2014). I argued in Chapter 3 that the majority of physiotherapy research and dominant thinking in this area is based on a realist ontology, that is, the belief that there is a single, knowable truth that exists independent of context or perspective (Crotty, 1998). In contrast, contemporary research in the disciplines of critical psychology and critical physiotherapy is usually based on a relativist ontology, where reality and truth are considered to be multiple and dependent on interpretation, context and perspective (Braun & Clarke, 2013; Gough & McFadden, 2013; M. Murray, 2015; Tuffin, 2004).

Epistemology is a concept that is closely related to ontology. Epistemology describes how the world might be investigated or researched (Crotty, 1998). Crotty wrote that there are three epistemological stances: objectivism, constructionism and subjectivism. Objectivism relates to a realist ontology, where “meaning, and therefore meaningful reality, exists as such apart from the operation of any consciousness” (Crotty, 1998, p. 8). Constructionism rejects this view and rather

proposes that “truth, or meaning, comes into existence in and out of our engagement with the realities in our world” (Crotty, 1998, p. 8). Finally, subjectivism is based on the understanding that the observer creates meaning independent of the object being observed.

As mentioned, research methodologies are always underpinned by ontological and epistemological assumptions (Crotty, 1998). According to Braun and Clarke (2013) methodology:

consists of theories and practices for how we go about conducting research. It provides a package of assumptions about what counts as research and how it is conducted, and the sorts of claims you can make about your data. Methodology can be understood as a theory of how research needs to proceed (p. 31)

These authors further argued that the term *methodology* is often conflated with *method*, positing that method refers to techniques of data collection and analysis, whereas methodology is broader and is the underlying framework for the research. I concur with Chamberlain (2012), who argued that it is important to determine which methods and methodology to employ based on a critical and reflexive consideration of the research to be undertaken. Chamberlain argued against choosing an “off the shelf” methodology unless there is a strong rationale that it particularly suits the enquiry. Rather, he maintained that it is important to create or adapt methods to suit the enquiry one wishes to make. Owing to congruency with theoretical perspectives, contemporary critical psychology scholars primarily use qualitative (or even post-qualitative) methodologies and data collection methods in their research (Braun & Clarke, 2013; Flick, 2015; Gough & McFadden, 2013; M. Murray, 2015; Tuffin, 2004). However, as Marks (2002) argued, it is a “critical, sceptical approach that questions the values, underlying assumptions and power relations” (p. 16) of social organisation that makes research critical, thus any research methodology has the potential to be critical if it is analysed using this perspective.

Previous work, including my own, on the physiotherapy-weight nexus has been entirely based on a realist ontology and an objectivist epistemology. Therefore, these studies have assumed that a concrete answer was possible for their research questions (i.e., it is possible to determine whether physiotherapists show weight stigma). This type of enquiry involves hypothetico-deductive analysis, where an *a priori* theory or hypothesis is tested. One of the limitations of this approach is that it does not allow for development of new theory nor is it conducive to considering social, institutional or political aspects of the nexus, an issue that I address with the empirical work of this thesis in Chapters 5 to 7.

As outlined in Chapter 1, the overarching research questions that drove the theoretical and empirical enquiry of my research were:

RQ1. Where, if at all, does weight stigma become a salient issue in physiotherapy?

RQ2. What, if anything, is endemic to the physiotherapy context that might institutionalise weight stigma?

RQ3. For the intersection between weight and physiotherapy, how might new possibilities be envisioned and implemented?

I designed three empirical studies to build on the empirical and theoretical enquiry already discussed. Separate more specific research questions were developed for these studies and are presented under the relevant subheadings below. Study 1 relates to RQ1; Study 2 relates to the RQ2; and Study 3 to RQ3.

I chose a different method for each study in order to enquire about different elements of my research topic. These methods are outlined within Chapters 5 to 7. However, because of the constraints of writing for journal publication, the depth of the description of the rationale for each method is limited (particularly in Chapters 5 and 6). This is perhaps especially the case because in order to carry out my “conversation” with the profession I intentionally published in high impact physiotherapy journals that are predominantly designed for reporting quantitative research. I wanted to be able to prioritise reporting that would be both seen and considered legitimate by physiotherapists, including those who are practitioners, researchers, and involved in teaching, management or policy making. As outlined in Chapter 1, I consider this conversation to be an important part of delivering research that has real-world relevance and impact. Considering the dearth of literature on weight stigma within this discipline (outlined in Chapter 3), and from my own informal observations through lived experience within the profession, I thought it was likely that participating in (or reading about) my work might be the first time that many physiotherapists had thought about weight stigma in the context of their work (or at all). As a result, for clarity of meaning, I thought it would be beneficial to account for the cultural norms of my particular audience and accommodate my communication appropriately (the value of this has been explored in Communication Accommodation Theory, see Giles, 2012).

Here I provide a more detailed explanation of my research design choices and consider each in the broader context of this thesis. To avoid unnecessary repetition, I explain in greater depth the elements that I have not addressed in the papers.

### **Reflections on choice of research design – Study 1**

*Specific research question: How do patients’ perceive interactions with physiotherapists involving weight?*

After considering physiotherapists’ attitudes towards people who are overweight in my earlier work (as outlined in Chapter 3), I thought it was important to investigate how the physiotherapy–weight nexus is seen from patients’ perspectives. This enquiry is based on a relativist ontology and a constructionist epistemology. This study assumes that individuals have a

particular experience of physiotherapy that, while important, embodied and meaningful, is not necessarily reflective of a single “true” reality. Rather the account is understood to be partial, constructed and incomplete (Crotty, 1998). As the participants describe only one possible reality, I assumed that other people involved in situations discussed may have a different experience of the interaction (Chamberlain, 2014). I also assumed that participants would give an account that was influenced by the researcher and research environment (Chamberlain, 2014). For example, participants may have responded in a particular way due to some aspects of the researcher’s personal characteristics or the research environment (Chamberlain, 2015). Personal reflexivity about these aspects of the research is important and is considered an aspect of rigour in qualitative research (Braun & Clarke, 2013; Chamberlain, 2015). Reflexivity regarding my positioning in conducting the study is discussed in Chapter 5 and more broadly regarding the thesis as a whole in Chapter 8.

Based on this epistemology, I chose to adapt a form of inductive thematic analysis (Braun & Clarke, 2006) as a methodology to explore patients’ perspectives. Thematic analysis is an appropriate form of analysis to use with many types of qualitative data including interview data about the experiences of participants (Braun & Clarke, 2013). In contrast to the deductive research approach used in previous work on weight stigma in physiotherapy, inductive studies do not test a pre-determined hypothesis, rather the researcher uses the data to create theory. Choosing an inductive methodology was appropriate for this study as I did not want to overlay a particular pre-chosen theoretical perspective upon the data (Braun & Clarke, 2013). That is, although a certain amount of interpretation is unavoidable, I sought to represent what patients of physiotherapists said rather than interpret it. This decision was made for ethical reasons because I considered myself an “outsider” researcher in this particular study; that is, I was not a part of the group being researched (Hayfield & Huxley, 2014).

Wigginton and Setchell (2016) argued that it is particularly important to consider the ethics of outsider positioning when researching stigmatised groups because researchers may inadvertently reproduce stigma and uneven power dynamics may be involved. In this study I was researching a group of people who, it has been argued, have been stigmatised and relatively silenced about the topic of weight in a healthcare context (Anderson, 2012; S. Murray, 2008; Setchell et al., 2015; Tischner & Malson, 2012). I used a number of strategies to manage my outsider positioning in this study, which I describe further in Chapter 5, including soliciting feedback of two “expert insiders” as consultants.

For this study I employed a data collection method that is commonly used in qualitative research: participant interviews. I chose interviews because they are arguably appropriate to discuss what might be a sensitive topic, due to the intimacy of the method (Braun & Clarke, 2013).

Furthermore, interviews have the ability to invoke rich, complex and detailed data about a particular topic (Braun & Clarke, 2013). I adapted this method to suit my enquiry in a number of less common ways. First, I conducted repeat interviews (considered important for in-depth qualitative inquiry but relatively uncommon in physiotherapy research practice) and second, I encouraged participants to use a diary to facilitate reflection between the interviews. Third, I intentionally situated the first interview in a physiotherapy environment (the second was by telephone). The participants arrived at a suburban private physiotherapy clinic for the interview, sat briefly in the waiting room where they could see typical elements of a physiotherapy clinic (such as an open plan exercise area, a reception desk, doors or curtains into treatment rooms) and interacted with the clinic by, for example, speaking with reception staff. Participants were then led to a treatment room where the interview was conducted amongst the equipment present there (anatomy charts, treatment table, mirrors, strapping tape). The rationale for the choice of these adaptations is presented in Chapter 5 and their value is further considered in Chapter 8.

Due to the constraints of journal publication, data analysis for Study 1 is described only briefly in Chapter 5. Analysis involved an iterative process. I initially read the entire transcribed dataset while listening to the audio recordings and made informal notes on the relevance of the data to the research questions. I then re-read the entire dataset and entered potential themes into data management software. The research team and I then discussed the provisional themes. I then coded the complete dataset into the data management software and refined the themes. These provisional themes were then shown to external “expert insiders” who provided feedback on the analysis. Incorporating this feedback, I then finalised the themes, which were then shown to the expert insiders and the remainder of the research team with any discrepancies discussed to agreement.

A reflexive diary was kept in this (and all studies), which included notes on various elements of the research. For example, I recorded my personal reactions to the participants and then used this to consider how (and if) this influenced my analysis of the data.

### **Contextualisation of research design within the broader thesis.**

This study fits with the combined approach to stigma that I proposed in Chapter 2. It provides an opportunity to investigate a number of elements of the physiotherapy–weight nexus and its possible interaction with stigma. In particular, the study adds to the insights from the attitudes tests of previous research on weight stigma in physiotherapy by investigating patients’ perceptions of weight-related clinical interactions. As a result, this study makes it possible to explore the lived and interactional features of stigma, as outlined by Goffman (1963), and also parts of the situated, macro-social and cultural elements of a post-structuralist perspective. This study could not report exactly what patients felt or an absolute truth about what happened in the interactions that they

described. However, it was possible to analyse what participants said about these interactions, and assume that this had a relationship to what they had experienced.

## **Reflections on choice of research design – Study 2**

*Specific research question: How do physiotherapists speak about overweight and obesity in the context of their work?*

After investigating patient experiences of the physiotherapy–weight nexus (Study 1) and considering previous work on attitudes outlined in Chapter 3, I explored why the types of attitudes and interactions I was finding were occurring. As my thesis focus is on physiotherapists' role in weight stigma, I was interested in exploring what ways of thinking about weight were dominant institutionally in physiotherapy. I also wanted to investigate how this was likely to affect clinical interactions.

This enquiry was based on a relativist ontology that relates to a constructionist epistemology. I used a variation of a discourse analysis, a type of interpretive methodology, for this study (Willig, 2003). An interpretive methodology is a form of qualitative research where a pre-existing theory is used to analyse the data (Braun & Clarke, 2013). I employed a Foucauldian theoretical perspective regarding the productive nature of discourse to explore the research question. As discussed in Chapter 2, Foucault saw discourses as constitutive of reality (Foucault, 1977a), and thus in a physiotherapy context, constitutive of practice. Thus, looking at what discourses physiotherapists predominantly (re)produced about weight can provide insight into what types of clinical practice were likely and, further, why stigma might occur. The approach is explained in more detail in Chapter 6.

I used focus groups as the data collection method, where a small group of participants are prompted to discuss a particular topic (Plummer-D'Amato, 2008). I developed a semi-structured session guide that included broad questions encouraging participating physiotherapists to discuss elements of weight in the context of their work. These discussions generated language as data that could be examined to locate dominant (and more silenced) discourses that physiotherapists used to discuss this topic. While focus groups as a data collection tool have the disadvantage of not necessarily generating naturalistic conversation, they have the benefit of placing participants amongst their colleagues so that groups would be likely to discuss weight as physiotherapists rather than as individuals (Braun & Clarke, 2013). This suited my enquiry that, as mentioned, is focussed on the institutional production of discourses. Focus groups conducted within a discourse analysis framework are not intended to achieve consensus, but rather to provide rich and textured data that can include nuance, contradictions and complexity (Plummer-D'Amato, 2008).

Another feature of focus groups is that the data they produce can end up representing the more talkative participants in the group (Plummer-D'Amato, 2008). In some ways this might be a

helpful factor that highlights which opinions are able to dominate these discussions. However, this dominance might be due to other reasons such as personality (Braun & Clarke, 2013). At times when facilitating the groups I partially mitigated the dominance of some participants by encouraging input from those who had contributed less.

I again chose to situate the data collection within physiotherapy workplaces. This technique was intended to stimulate thought and conversation about that context, but also to further encourage the participants to think like physiotherapists. In some cases I travelled to the workplace of the participating physiotherapists, which had an additional benefit of making focus groups easier to organise. This strategy also helped to diminish another potential disadvantage of focus groups as a data collection method: they can be difficult to arrange, perhaps particularly with busy professionals (Braun & Clarke, 2013).

### **Contextualisation of research design within the broader thesis.**

Study 2 examined the production of stigma in alignment with the post-structuralist and Foucauldian concepts that I have argued are useful for understanding this aspect of stigma. This research approach is particularly focused on consideration of cultural, political and historical factors (Braun & Clarke, 2013; Willig, 2008) and thus provides insight into these aspects of the physiotherapy–weight nexus. Having a relativist ontology like Study 1, this study cannot provide a definite understanding of what happens in the physiotherapy–weight nexus (nor is it intended to). However, the design provides an opportunity to build on the first study and previous research to explore, based on the dominant discourses the participants produce, what makes weight stigma possible in physiotherapy and what types of clinical practices are likely.

### **Reflections on choice of research design – Study 3**

*Specific research question: How might physiotherapists (re)think ways of working with people who are overweight?*

In the final study of the thesis, I was interested in whether what I had learnt about the physiotherapy–weight nexus from the first two studies (and other literatures) might help to find ways to reduce weight stigma. I approached a rethinking of the physiotherapy–weight nexus by combining these new knowledges with theoretical considerations about how weight stigma might be reduced. The theory used in Study 3 is a combination of the stigma theory I outlined in Chapters 2 and 3, and a consideration of the literature on weight stigma reduction trials conducted by others. This theory is outlined in depth in Chapter 7 (which is, at times, necessarily a repetition of some of the theory in Chapters 2 and 3). Based on this theory I developed an empirical “intervention” study. I designed this study to suit a practice-focused (re)thinking of the physiotherapy–weight nexus.



I used a methodology that is best described as a modified version of action research. Action research is a combination of research, participation and intervention (Greenwood & Levin, 2007). This methodology does not necessarily adhere to only one ontological or epistemological framework, although it is most often constructionist (Greenwood & Levin, 2007). Action research can involve a variety of methods and data collection techniques (Kagan, Burton, & Siddiquee, 2008). This approach suited my intentions as I wanted to combine a number of elements of my previous findings into a process to work with physiotherapists to (re)consider their practice. I combined focus groups, one-to-one interviews, diary reflections and directed self-learning in a participatory process that had flexibility to be adapted to suit the individuals who took part in the intervention. The rationale for the use of each of these components is explained in detail in Chapter 7.

I used a small sample size (eight participants) so that I could explore this topic in-depth. As a result, the outcomes of this study cannot give a definite answer on whether the empirical “intervention” was successful in reducing weight stigma or changing practice. Rather indications of stigma reduction could be derived from what participants said about their changes in practice and thinking. Furthermore, my own reflections produced some data about the implications of this intervention study. Both of these elements are discussed in detail in Chapter 7.

### **Contextualisation of research design within the broader thesis.**

This final study marked a shift in direction from exploring the physiotherapy–weight nexus to considering and trialling ways to rethink potentially problematic elements of it. Here I was able to put into practice the suggestions and conclusions of my other empirical studies to see, in close encounters with physiotherapists, how they were received and understood by the profession. In applying the empirical and theoretical work of the thesis I could consider how, and if, it is applicable to clinicians. The methodology of this study was congruent with the broad understandings of stigma developed in this thesis.

### **Conclusion**

In order to explore the intersection of physiotherapy and weight, a topic that has had little research attention in the past, I employed a diverse range of research methods grounded in various theoretical assumptions. The three studies provide an opportunity to investigate, and try to change, different elements of weight stigma congruent with the theoretical understandings of stigma, weight and physiotherapy presented in Chapters 2 and 3. While each study had a different approach and focus, at a broader level, they provided different perspectives on the same issue. Collectively, these studies provided an opportunity for some much-needed insight into the reasons for, and approaches to, weight stigma in physiotherapy.

## **Chapter 5: Patient perceptions of weight-related interactions with physiotherapists**

While previous work on weight stigma in physiotherapy including my own earlier study (discussed in Chapter 3) gave insight into the attitudes of physiotherapists, it gave little indication of how, or if, these attitudes might play out in clinical settings. As discussed in Chapter 4, earlier studies were grounded in a realist ontology and, as a result, could only seek an essentialist truth about the presence or absence of weight stigma in physiotherapy. Discussing the results of these studies from this positivist perspective, it appears that physiotherapists do demonstrate weight stigma. However, looking at the findings using a relativist ontological perspective, it can be argued that the political, historical or sociocultural context could not be considered. The studies also did not explore the embodied elements of stigma for people who may be the target of these attitudes or many elements of the interactional (social) aspects that Goffman has described. In order to consider these factors, I designed an in-depth investigation to provide a more situated insight into the weight–physiotherapy nexus in clinical interactions. I explored how patients perceived such interactions with physiotherapists.

There was no previous literature on this topic specific to physiotherapy, although studies of the experiences of patients associated with weight have been conducted with other health professionals. In a systematic review that included 12 studies of obese (by BMI) patients' experiences of healthcare in a variety of settings, Mold and Forbes (2011) found that these patients reported experiencing stigma and feelings of powerlessness, psycho-emotional issues, and variations in health contact time, treatment options and preventative measures compared with people who were not seen as overweight. More recent studies have reported similar results. For example, a Danish study using a phenomenological approach found that pregnant women with a BMI above 30 felt that they received accusatory responses and judgement in conversations with general practitioners (Lindhardt, Rubak, Mogensen, Lamont, & Joergensen, 2013).

These studies focussed on the interpersonal communication aspects of interactions and the embodied emotional or psychological experiences of the patients. However, I argue that other elements of a health professional interaction, such as the influence of the clinical environment or patient preconceptions of healthcare experiences, have rarely been investigated. Furthermore, I have not found any studies investigating patients' perspectives of weight-related physiotherapy interactions. To explore these gaps in the literature I designed a study using semi-structured interviews to discuss these topics with patients who had identified that they had experienced interactions where their weight was relevant. To facilitate rich reflections, I spoke with each participant twice, and provided the participants with a reflexive diary to prompt recollection of

reactions to the research topics between interviews. The study is presented here in the form of a published paper. Additional information about the research in this chapter is provided in Appendices B1-4. This information includes the recruitment materials, participant information sheet, demographic form, consent form, interview guides and diary.

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*Title:* Weight stigma in physiotherapy practice: Patient perceptions of interactions with physiotherapists.

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## ABSTRACT

**Background:** Weight management is increasingly considered part of physiotherapists' scope of practice in order to improve patient outcomes by, for example, reducing load on joints, or improving chronic pain. However, interactions with patients involving weight may result in patient perceptions of negative judgment from health professionals, which can result in poorer health outcomes. How physiotherapist/patient interactions involving weight are perceived by patients has not yet been investigated. **Objectives:** To explore patients' perceptions of interactions with physiotherapists that involved weight, and investigate how these perceptions may inform physiotherapy practice. **Design:** Face-to-face interviews with physiotherapy patients, with follow up interviews conducted by telephone. Data were analysed thematically. **Method:** First interviews were held in a physiotherapy practice with follow up interviews conducted two weeks later. Interviews were audio recorded, transcribed and analysed using an inductive thematic method established by Braun and Clarke. **Findings:** Thirty interviews with 15 patients were analysed. Four main themes relevant to weight were identified: 1) perceptions of being 'in physiotherapy' including pre-conceptions, the physical environment, and exposing the body, 2) emphasis placed on weight in physiotherapy interactions, 3) communication styles, and 4) judgment perception. **Conclusion:** Some patients perceived negative weight judgments from elements of physiotherapy interactions and environments. Physiotherapists need to be aware of this perception because it may result in poorer patient outcomes and patients avoiding physiotherapy appointments. The results suggest strategies to counteract weight stigma include: adjusting the physical environment of the clinic, portraying an understanding of complex determinants of weight, and employing collaborative, non-judgmental communication styles.

**Keywords:** physiotherapy, obesity, stigma, reflexivity

## INTRODUCTION

Weight management is increasingly considered part of physiotherapists' scope of practice (Snodgrass et al., 2014; Rea et al., 2004). Messages encouraging integration of weight management into physiotherapy have become fairly commonplace from physiotherapy leaders and in popular physiotherapy forums (e.g., Dripps, 2014; Physiopedia, 2011). Furthermore, as the body is the focus of physiotherapy, weight is likely to be salient regardless of whether weight management is a focus. Body weight is, therefore, likely to be involved in physiotherapy interactions. Whether physiotherapists are helping or harming patients with interactions involving weight has not received much attention. This is important from an ethical standpoint given that physiotherapy codes of conduct include 'do no harm' (Guttman & Salmon, 2004). Physiotherapists likely focus on weight to improve patient outcomes by, for example, reducing the load on joints, or improving chronic pain. However, weight is a sensitive topic and perceptions of weight stigma (negative attitudes towards weight) result in poorer health outcomes (Puhl & King, 2013). Thus, an intervention intended to improve the health of the patient may, if it is perceived as stigmatising, result in harm. Whether patients perceive weight stigma from physiotherapists is, therefore, an important consideration.

Weight stigma involves negatively stereotyping people perceived to be overweight with characteristics such as laziness, sloppiness, ill-health and lower intelligence (Carr & Friedman, 2005). Weight stigma in the general population has been reported as prevalent (Puhl & Heuer, 2009) and increasing (Andreyeva et al., 2008), and having adverse effects on health (Puhl & King, 2013). A minority view suggests weight stigma or 'fat shaming' may have positive effects on health behaviours (Ogden, 2013), but the contrary has been demonstrated consistently. People who perceive they are recipients of weight stigma avoid health care appointments (Drury & Louis, 2002), exercise less (Vartanian & Shaprow, 2008) and have more disordered eating (Tomiyama, 2014). Weight stigma has been discussed as widespread in society i.e. in media, government policy and within health (Lupton, 2012; Campos et al., 2006). For example, the complex and multifactorial causes of weight are frequently depicted as a simplistic energy imbalance, with causes assigned to individual responsibility (Gard & Wright, 2005; McAllister et al., 2009). This is despite consistent findings, including Cochrane reviews, that dieting is ineffective in reducing weight beyond short-term changes (Norris, 2005) and exercise has inconsistent effects on weight (Shaw et al., 2006). A variety of health professionals exhibit weight stigma including doctors (Sabin et al., 2012), nurses (Mulherin et al., 2013), exercise scientists (Chambliss et al., 2004) and dieticians (Stone & Werner, 2012). Sack et al. (2009) reported that physiotherapists had neutral attitudes to people who are

obese, despite finding over 50% believed people who are obese were weak-willed, non-compliant and unattractive. These results suggest physiotherapists likewise possess negative stereotypes of overweight people. Setchell et al. (2014) found physiotherapists demonstrated implicit weight stigma in responses to case studies, and explicit (overt) weight stigma in responses to an anti-fat attitudes measure. However, whether weight stigma affects physiotherapist/patient interactions, or is perceived by patients, has not yet been explored.

In other areas of health, weight stigma affects health professional-patient interactions. Overweight male patients perceived poorer quality of care from physicians, including reduced length of consultation (Hebl et al., 2003). Pregnant women with a BMI greater than 30kg/m<sup>2</sup> reported accusatory responses, a lack of respect and insufficient helpful advice from their general practitioners (Lindhardt et al., 2013). Patients who perceived negative judgment about their weight trusted their health professionals less than those who did not (Gudzune et al., 2014). Moreover, a survey of public opinion regarding language used to discuss weight by doctors found that more negative language resulted in lower patient motivation levels and participants expressing a greater likelihood of changing health care providers (Puhl et al., 2012b). In a study of obese women's experiences of healthcare, Buxton and Snethen (2013) highlighted the importance of respect and communication styles in weight loss discussions.

To date, no studies have investigated how physiotherapy patients perceive weight related interactions. To address this deficit, this study explored the following research questions: How do patients perceive interactions with physiotherapists involving weight? What elements (if any) of physiotherapy interactions do patients perceive as weight stigmatising?

## METHODS AND MATERIALS

### Design

Physiotherapy patients' experiences were explored using a qualitative semi-structured interview design. Two in-depth, semi-structured interviews were conducted with each participant. A second interview is thought to provoke a reflective or analytical perspective from the participant, while the first focuses more on experiences (Flowers, 2008). Participants responded to open-ended questions about their experience of interactions with physiotherapists involving body weight (Appendix 1). Questions were developed from the findings of Setchell et al.'s (2014) study on weight stigma in physiotherapists and from available literature on weight stigma. However, the presence of weight stigma was not assumed. Interviews were piloted on two participants resulting in minor alterations to the question guide. Two experts in the field of weight, whose professional roles include

investigating implications of negative judgments about weight from health professionals, were engaged as consultants. They provided feedback on design and analysis from the perspective of those who have been stigmatised for their weight (Louis & Bartunek, 1992). *A priori* rigour and quality procedures were established based on consolidated criteria for reporting qualitative research (COREQ: Tong et al., 2007). Ethics approval was obtained from the institutional ethics committee and all participants provided informed consent.

### Participants

Participants were current Brisbane, Australia residents who had been patients of physiotherapists. Recruitment was via posting on 'community noticeboards', including Facebook and Twitter, and notices at shopping areas or workplaces within a 10km radius of the first interview location. Although the sampling strategy was a convenience sample, the researchers intentionally recruited in environments with potential participants who varied in socio-economic status, ethnicity, gender and age. The number of participants was determined as the study progressed, when saturation was reached (i.e., when few new topics were being discussed, and themes had sufficient data for analysis). Data were analysed following each interview in an iterative process during recruitment.

Data saturation was reached with 15 participants (30 interviews). Forty-one people responded to broad recruitment strategies inviting participants to discuss their experiences as a physiotherapy patient. All were contacted by telephone and asked whether they had had experiences involving weight in a physiotherapy context. The researcher clarified, if needed, that weight experiences could be neutral, positive or negative, could be about being any body size, and about the patient's body, the physiotherapist's body or someone else's. There was no restriction on when this experience occurred as patient perceptions, rather than actual experiences, were the research focus. For ethical reasons persons were not considered if they had been a patient of the first author or had attended the physiotherapy practice used to conduct interviews. Twenty six people were excluded because they had either not had experiences involving weight in a physiotherapy context (19), attended the practice where the interviews were being conducted (2), were unable to attend interviews (1), had never attended physiotherapy (2), or did not respond to follow up contact (2).

### Procedure

The first author who conducted the interviews was trained in qualitative interviewing. The first interview was face-to-face and 'situated' in a private physiotherapy clinic. A 'situated' interview (conducted in an environment that is similar to where the experiences being discussed had occurred) was chosen to facilitate access to memories of previous physiotherapy experiences



(Carpiano, 2009). Demographic information was gathered and a debrief sheet provided after the first interview. The interviewer took field notes in a reflexive diary following each interview. Participants received a diary after the first interview to facilitate reflection on the topics discussed (Appendix 1). The diary was designed for participants' personal reflection and was not used directly in the analysis.

The second interviews were conducted two weeks after the first, by telephone. Second interviews provided opportunity for participants to discuss new ideas arising after the first interview, and for the interviewer to ask further questions. Transcripts were not returned directly to participants for verification, but preliminary analysis from the first interview was presented to participants for feedback in their second interview. Interview length was not predetermined and was concluded when both participant and interviewer agreed they had exhausted discussion of the topic. All 15 participants completed both interviews approximately two weeks apart, as intended, although one initial interview was conducted by telephone, as the participant was unwell. This interview was shorter and less in-depth. There were no refusals to participate or answer any questions.

#### Data management

All interviews were audio recorded and transcribed for analysis. Transcripts were de-identified and pseudonyms used. The first author coded the transcripts and organised these codes into thematic groups derived from the data in data management software. Themes were clarified and analysed using inductive thematic analysis as developed by Braun and Clarke (2013). Thematic analysis is 'a method for identifying themes and patterns of meaning across a dataset in relation to a research question' (Braun and Clarke, 2013, p175). Inductive thematic analysis aims to generate analysis from data, rather than being driven by existing theory. Analysis followed an iterative process of review, clarification and revision (Braun et al., 2013). To minimise the effect of the researchers' views on the results, the research was considered reflexively at all stages including design (minimising leading questions), data collection (neutral tone, non leading questions), and analysis (exclusion of answers to inadvertent leading questions). The other authors, and the consultants read the transcripts. They confirmed analysis was credible and grounded in the data.

Results and discussion are presented in synchrony and quotes use participants' pseudonyms.

## RESULTS AND DISCUSSION

### Demographics

Participants' (n=15) age range was 27 to 68 years, with 10 identifying as female, four as male and one as male transgendered. The group was generally highly educated despite attempts to recruit a diverse socio-economic spectrum. Race/ethnicity was mostly white-Australian, except for three participants (Anglo-Irish (1), black-British (1) and mixed including indigenous-Australian (1)). Participants' body weight was intentionally neither measured as part of the research, nor directly mentioned by the interviewer, yet most (13 of 15) participants discussed experiences which were about being seen as 'overweight', while two discussed experiences of being seen as 'underweight'. There were no discussions about being seen as 'normal weight'.

### Physiotherapy experiences

Participants recalled experiencing treatment by 54 different physiotherapists, primarily in South-East Queensland, with a minority of experiences elsewhere (Sydney and London). These physiotherapy experiences were mostly musculoskeletal, although some were in other settings (orthopaedic, women's health, neurology and respiratory). Participants identified weight interactions with 35 of their physiotherapists, of these 33 were during musculoskeletal consultations, most often in private practice settings.

### Themes

In-depth analysis of the 30 interviews identified four major themes, five sub-themes and three to five codes for each sub-theme (Table 1).

Table 1: Outline of themes, sub-themes and codes from interview data investigating patient experiences of physiotherapy interactions involving weight. NB: physiotherapy or physiotherapist is abbreviated as 'PT'

Themes	Sub-themes	Codes				
<b>1. Being 'in physiotherapy (PT)'</b>	<b>a) Situating PT</b>	PT as health	PT as sport/fitness	Expecting weight to be mentioned		
	<b>b) Physical environment</b>	Prominent mirrors	Images displayed	Furniture, equipment	The body of the PT	
	<b>c) Exposed body</b>	Openness of treatment area	Disrobing, being partially undressed	Being observed or touched		
<b>2. Is weight relevant?</b>		Emphasis on weight	Weight causes PT conditions?	Weight as complex		
<b>3. Communication</b>	<b>a) Weight talk</b>	Level of collaboration	Timing matters	Silences speaking volumes		
	<b>b) Communication styles</b>	Empathy and rapport	Level of collaboration	Being seen as person, holistic care	Attention quality	Attitude, level of judgment
<b>4. Judgment (perceived and self)</b>		Feeling not good (fit/thin) enough	Negative thoughts about own weight	Does the PT see weight like this or do I?		

## Theme 1. Being ‘in physiotherapy’

Participants identified a number of elements of the physiotherapy environment as making weight salient. These comprised three subthemes: *‘situating physiotherapy’*, which refers to the patient’s pre-existing ideas about physiotherapy, *‘physical environment’*, which refers to the physical physiotherapy environment (usually a ‘clinic’ or similar) and *‘exposed body’*, which refers to being exposed visually, or to touch, in a physiotherapy context.

### *Situating physiotherapy*

Participants saw physiotherapy as similar to, or part of, both the health and sports/fitness industries. This meant physiotherapy was commonly perceived as having similar attitudes towards weight (i.e., often negative) as these industries. Participants often indicated that they arrived at physiotherapy with the preconception that they would be judged negatively for being overweight. Ellie, for example, described how other health care and sporting interactions *“have very much informed ... how I feel when I go into a physio setting”*. Russell and Carryer (2013) noted a similar effect in physicians’ patients, where they ‘entered into the general practice domain with a heightened sensitivity to stigmatization...’. As Hetti stated, patients expect that weight will be mentioned in physiotherapy: *“It’s just my assumption that at some point in the conversation there’s going to be a comment about me being a bit overweight”*. Thus, before patients enter the clinic, they are influenced by their pre-existing ideas of physiotherapy’s attitudes towards weight. Patients may perceive different clinical settings differently. For example, Lena reported feeling uncomfortable about her weight in sports physiotherapy environments yet perceived more positive experiences in less sports-focussed clinics. She said: *“it was all very relaxed and a very different experience”*.

### *Physical environment*

Participants discussed a number of elements in the physical physiotherapy environment that increased patient discomfort, often precipitating negative body image evaluation and fear of being judged. These included prominent presence of mirrors (see Martin-Ginis et al. [2003] for more on how people feel worse after exercising in front of mirrors), use of images privileging thin bodies (in advertising, websites, health promotion materials and charts displayed in clinics), furniture that was poorly designed for a range of body sizes, and visible displays of exercise equipment. Nico described his reaction to the Pilates equipment visible in the clinic where the interview was conducted: *“when I was really struggling with my weight I think it [seeing the gym-like environment] .... I probably would have felt a bit guilty.”* A number of participants also mentioned the body of the physiotherapist. As Jaya explained *“having your weight mentioned by someone who is ... obviously very fit and healthy made it sort of feel more uncomfortable”*.

### *Exposed body*

Participants frequently mentioned that seeing a physiotherapist was confronting in relationship to body weight, as their bodies would be exposed visually or to touch. This included the lack of privacy in open treatment area layouts, being partially undressed, being watched while moving/exercising and having ‘hands-on’ treatment. Eimer described discomfort regarding the openness of the exercise area in a university clinic: *“an open environment particularly where there’s other people around brings up lots of issues for me”*. Ellie explained that being undressed in front of someone is *“confronting”* and *“makes me think more about my weight”* and Nina stated that exercising in an environment where *“everyone can see you”* is also *“confronting for someone who is overweight”*.

### Theme 2. Is weight relevant?

This theme had no sub-themes. Rather, there were three codes for the relevance of weight to physiotherapy: too much emphasis placed on weight by physiotherapists; the plausibility of the relationship of weight to conditions treated by physiotherapists; and the causes of body weight. Hetti questioned the emphasis on weight in a women’s health physiotherapy appointment: *“it was just like: ‘oh for God’s sake, I’ve just had all this happen to my body and now you’re telling me that I should think about weight!’”*. Jaya questioned the plausibility of her weight’s relevance to her back pain: *“It keeps getting blamed on my weight. I think that made me a bit defensive about going [to physiotherapy] .... I have a bad back and I’m fat. And that might make it worse but it certainly isn’t the cause or the root of my back pain”*.

Physiotherapists tend to focus on simplistic, individually controllable causes of weight (Setchell et al., 2014). However, all participants, regardless of body size, reported that the causes of their body weight were more complicated than individually controllable factors such as diet and exercise. Reported causes included: thyroid cancer, side effects of medication (anti-depressants, steroids for respiratory conditions and HIV medications), inactivity due to injury (both overweight and underweight), social circumstances and substance addiction. No participant said that weight was simple to control or change with diet or exercise. Interestingly, while the interviewer never directly asked what might be the cause of each participant’s body weight, all participants discussed this. Perhaps, like other patients, they wanted to pre-empt the usual ideas about the simplicity of the determinants of weight (Puhl et al., 2008), which blames individuals (Tischner & Malson, 2011).

A minority of participants described positive experiences of negotiating weight with physiotherapists. Darren related what he perceived as a positive interaction with his physiotherapist in which he felt the emphasis on weight was appropriate. He described that she explained that to *“lose weight would help but the main thing was to strengthen the quadricep muscle”*.

### Theme 3. Communication

This theme had two inter-related sub themes: communication about weight or ‘weight talk’ and more generally ‘communication styles’.

#### *Weight talk*

Participants discussed a number of ways in which physiotherapists talked about weight – some perceived as more positive than others. Salient factors as to how positively conversations about weight were perceived were: levels of collaboration, timing and silence (non-responding). Collaborative communication involved two-way conversation involving both the physiotherapist and the patient’s knowledge and opinions. Conversely, educative communication involved only the physiotherapist’s knowledge being shared by ‘telling’ the patient information. Participants reported both of these types of communication, although educative interactions more frequently. Participants overwhelmingly perceived collaborative interactions more positively. Positive collaborative discussions about weight included the physiotherapist acknowledging the patient would already know they were ‘overweight’ and the physiotherapist not assuming that the patient was overweight due to ‘easily controllable’ factors such as exercise and diet. Jaya described an interaction she viewed negatively: *“it wasn’t news to me.... having somebody state the obvious in a statement way is never nice”*. Darren had a more collaborative interaction: *“she wasn’t necessarily informing me but she was just kind of, you know, assuming prior knowledge”*.

The timing of weight related discussions was seen as more appropriate when the patient was clothed, and when rapport had already been established. Ellie described her discomfort at being undressed when her physiotherapist mentioned she thought Ellie had lost weight: *“you’re already in an uncomfortable situation where you’re semi-naked so maybe it’s not the best time to think about what you look like”*. While there were difficulties discussing weight, not talking about weight, if mentioned by patients, was also problematic. For example, Ellie assumed when her physiotherapist said nothing that meant something negative about her weight: *“I do assume that, yeah, there’s some level of unhappiness with my weight and it would help the cause if I was not as overweight as I am”* and Radwa wanted more information than the (perceived as dismissive) change of topic she received when she asked if weight was contributing to her knee problem.

### *Communication Styles*

Physiotherapists' communication styles in interactions not associated with weight influenced how well communications about weight were perceived. Participants perceived general interactions as more positive when physiotherapists expressed empathy during treatment sessions, and used a collaborative rather than an educative communication approach. Participants also viewed a person centred approach more positively, where participants felt they were considered as individuals. The quality of the physiotherapists' attention was also important as Eimer described: *"it wasn't that he wasn't confident - it was just that he wasn't as involved"*. Participants perceived good attention (appearing interested) and non-judgmental/positive attitude as positive and likely to preface good interactions about weight when it occurred. Kyle gives his perspective on this: *"it's about interpersonal communication. So some physios might not be able to pick up what you're putting down. Others would and then it just depends on whether that relationship blossoms into something that creates healing and creates a positive situation."*

### Theme 4. Judgment (perceived and self)

Participants who considered themselves to be overweight frequently felt that they would be (or have been) judged as not thin/active/good enough in a physiotherapy environment. Before going to her first physiotherapy appointment Nina said: *"I felt people were going to judge me and wonder why I've got to the way I've got and how come I've let it (sic) and blame me"*. Participants also frequently described negative self-evaluations about their weight in response to physiotherapy environments. Eimer said *"there's so much talk at the moment about health and obesity that ... if you're not really slim and really fit then you feel like there's something wrong with you"*. Emotions commonly included: guilt, shame, embarrassment, self-consciousness and a sense of being a failure. Participants frequently questioned whether these negative self-evaluations were due to the physiotherapy environment or to projections of their own self-image, and commonly blamed themselves for these perceptions, a form of self-stigmatisation. Nina said *"Nothing was done to me that made me feel like that. It was my own head."* This sense of shame, self-blame and fear of receiving weight stigma is considered one of the reasons people are likely to avoid healthcare appointments (Pausé, 2014).

### Summary and inter-relationship of themes

In summary, participants generally recounted negative (or stigmatising) experiences of interactions involving weight in physiotherapy settings, although positive interactions were sometimes described. The findings of this study suggested a number of factors in physiotherapy interactions

that participants perceived as being relevant to weight. These included: elements of being ‘in physiotherapy’, physiotherapists’ attitudes to, and knowledge of, weight; and physiotherapists’ communication styles. The four themes outlined above were inter-related. Generally, if elements of one theme were present they amplified effects of other experiences. For example, participants reported that if a physiotherapy environment had a thin physiotherapist or a sporty looking clinic this could increase negative self-evaluations and fear of judgment, which in turn could negatively affect perceptions of communication. Participants also discussed that the converse situation occurred. For example, good communication helped to mitigate the effects of the environment or self-stigmatisation.

## CONCLUSIONS

### Implications

The findings of this study indicate that physiotherapy encounters have many elements that relate to weight. Further, although some patients had positive perceptions of weight interactions with physiotherapists, many patients may expect and perceive that physiotherapists have negative attitudes towards ‘overweight bodies’ (weight stigma). In some cases these perceived attitudes may be because physiotherapists do stereotype (Sack et al., 2009) or stigmatise (Setchell et al., 2014) people who are overweight. Alternatively, but still important, it may be a matter of patients’ perceptions or stereotypes of physiotherapists. While physiotherapists may not be able to change patient perceptions, they can use this knowledge to be more sensitive. Whether due to physiotherapist attitudes or patient perceptions, this expectation of negative attitudes towards weight is problematic, as patients who perceive weight stigma trust their health care professional less (Gudzune et al., 2014) and may change health providers (Puhl et al., 2012a). Further, this stigma may have a negative effect on patients, including poorer psychological and physical health outcomes (Bacon & Aphramor, 2011; Schvey et al., 2014). Findings from this study highlight a number of topics worthy of enquiry that are beyond what can reasonably be interpreted from these data. To address this, further research investigating physiotherapists’ attitudes in a clinical setting is warranted.

Because, this research was conducted in one geographical location some aspects of physiotherapy interactions about weight may not have been covered. Therefore, there may be limits to the generalisability of findings to different socio-cultural physiotherapy environments. However, the findings do describe many aspects of the physiotherapy experience and are likely to have applications to broader physiotherapy contexts. Despite participants recalling a variety of physiotherapy experiences, most weight salient or stigmatising experiences were recollected to be



during musculoskeletal and private practice physiotherapy interactions. This focus, however, may have been over-demonstrated due to the initial interview being situated in a musculoskeletal setting, despite the interviewer encouraging reflection on a variety of physiotherapy experiences.

A number of factors may have influenced the results of this study. Recollections of older interactions may be subject to recall bias. However, all recollections are what the patients believe and so are valid and relevant. The interviewer's views may have influenced the data. Attempts were made to minimise this throughout data collection where the interviewer was careful not to provide her own views. However, the interviewer's status as thin and a physiotherapist could position her as an 'outsider' with overweight participants and thus potentially elicit a more cautious response, whereby participants would be less explicit (Hayfield & Huxley, 2014) about weight stigmatising experiences. The rapport developed over the two interviews likely mitigated this. The findings indicate further study of weight interactions in physiotherapy is warranted.

### Suggestions for clinical practice

Patients' perspectives reported in this study suggest physiotherapists may not adequately understand, sufficiently consider or be educated about the discomfort interactions involving weight may precipitate. To address this, physiotherapists do not necessarily need to dramatically change practice, but could consider implementing a number of practical strategies based on the findings from this study and other related research. Organisations representing the profession, as well as individual physiotherapy clinics, could consider using a range of body sizes when creating visual material such as advertising, websites, charts or health promotion materials (Pause, 2014). When creating or adapting physiotherapy environments, prominence of mirrors (Martin-Ginis et al., 2003) could be considered, as well the suitability of equipment/furniture for a range of body sizes. Further, the privacy of the physical layout of the clinic, both in terms of treatment rooms and exercise/movement analysis areas, is another area for consideration. It is also important to be aware of the sensitivity of exposing the body and the negative self-judgments this may precipitate. Thus, when the patient is disrobing or disrobed physiotherapists should be particularly careful about what is being discussed. When weight is considered relevant to discuss, collaborative styles of communication (Trede, 2012) are more helpful, without assumptions about patient knowledge levels or weight's causes. The topic of weight should neither be ignored nor overemphasized, and should be handled with empathy (Watson & Gallois, 1998) and a non-judgmental tone. Patient centred general communication styles and rapport building (Street Jr. et al., 2009) are likely to enhance specific communication about weight.

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## **Chapter 6: Physiotherapists' ways of talking about overweight and obesity**

The study presented in Chapter 5 provided an in-depth insight into patients' perceptions of the embodied aspects of stigma in physiotherapy interactions. The findings indicated pervasive experiences or expectations of perceived judgement of fat bodies. Further, the study gave an indication of the particular relevance of weight in the under-examined context of physiotherapy, and highlighted weight stigma in a number of elements of clinical interactions. In the broader context of this thesis, I argue that when considering my findings from a critical post-structuralist perspective these results highlight that certain "truths" about weight seem to be constructed in a physiotherapy context. For example, underlying patients' talk about weight experiences was an indication that fat patients were unintelligent (being told things they already know, lack of collaboration), unhealthy (visual representation of only thin bodies as active/healthy) and at fault for their pain (fatness as controllable, fatness as responsible for physiotherapy-type problems). Furthermore, I would argue that these "truths" included that fatness is important to physiotherapy (expecting fatness to be brought up). As mentioned in Chapters 2 and 3, this creation of "truth" has implications for power in weight-related interactions.

In order to investigate these emerging weight-related "truths" further and examine more directly how physiotherapists construct fatness, I designed a study grounded in discourse analysis. Foucault's theories examine how discourses can be understood as productive of reality (Foucault, 1977a). It follows that the discourses that physiotherapists use make certain clinical practices more likely. Examining discourses can provide insights into the creation of "truths" about weight in a physiotherapy context that are relevant to power in these types of interactions with patients. Furthermore, investigating the discourses physiotherapists (re)produce could help to understand how and why weight stigma is possible in physiotherapy. This study builds on my previous two studies by providing opportunities to gain insight into the social, cultural and political aspects of stigma that I highlighted using post-structuralist theory in Chapter 2. The study is presented here in the form of a published paper. Additional information about the research in this chapter is provided in Appendices C1-4. This information includes the recruitment materials, participant information sheet, demographic form, consent form, focus group guide and debrief.

Setchell, J., Watson, B., Gard, M., & Jones, L. (2016) Physical therapists' ways of talking about overweight and obesity: Clinical implications. *Physical Therapy Journal*. 96(6), 865-875. doi: 10.2522/ptj.20150286

## **Physical therapists' ways of talking about overweight and obesity: Clinical implications.**

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## **Abstract**

**Background:** How people think and talk about weight is important because it can influence their behavior towards people who are overweight. One study has shown that physical therapists have negative attitudes towards people who are overweight. However, how this translates into clinical practice is not well understood. Investigating physical therapists' ways of thinking and speaking about overweight and obesity in the context of their work can provide insight into this under-researched area.

**Objectives:** To investigate physical therapists' ways of talking about overweight individuals, and discuss clinical implications.

**Design:** The study employed an interpretive qualitative design.

**Methods:** The research team used discourse analysis, a type of inductive qualitative methodology, to guide data collection and analysis. The data came from six focus groups of 4-6 physical therapists in Queensland, Australia who discussed weight in a physical therapy environment. Participants (n=27) represented a variety of physical therapy sub-disciplines.

**Results:** Data analysis identified four main weight discourses (ways of thinking/speaking about weight). Participants described patients who are overweight as 1) little affected by stigma, and 2) difficult to treat. Further, participants portrayed weight as 3) having simple causes, and 4) important in physical therapy. Alternate weight discourses were less frequent in these data.

**Conclusions:** Results indicated some physical therapists' understandings of weight might lead to negative interactions with patients who are overweight. Findings suggest physical therapists require more nuanced understandings of: how patients who are overweight might feel in a physical therapy setting; the complexity of causes of weight; and possible benefits and disadvantages of introducing weight management discussions with patients. Therefore, education should encourage complex understandings of working with patients of all sizes including knowledge of weight stigma.



## Introduction

Physical therapists have demonstrated negative attitudes towards people with high body weights (weight stigma),<sup>1</sup> and patients have perceived elements of physical therapy interactions as weight stigmatizing<sup>2</sup>. Despite this, there has been little investigation of how and why this occurs, nor how to reduce this weight stigma. One way to investigate further physical therapy interactions that involve weight is to look at *discourses* about weight. A discourse is a distinct way of thinking or talking about a topic.<sup>3</sup> People's weight discourses are important because they can influence their behaviour towards people who are seen as overweight.<sup>4</sup> While physical therapy weight discourses (i.e., ways of thinking or talking about weight) have not yet been investigated, some common weight discourses in other health contexts may be relevant to physical therapy. One weight discourse in healthcare emphasizes individually controllable lifestyle causes such as diet and exercise. This commonly held perspective is pervasive despite evidence to the contrary.<sup>5</sup> For example, many studies, including large Cochrane and government reviews, report that changing lifestyle factors such as exercise<sup>6,7</sup> and diet<sup>7</sup> have minimal, or no effect on weight. Further, researchers have considered the importance of other contributors to the trajectory of weight, including for example: medications, epigenetics, rising maternal age, micro-organisms, assortative mating, sleep debt and endocrine disorders.<sup>8</sup> Focussing on diet and exercise as the primary ways to reduce weight may have negative implications, such as setting a patient up for weight loss failure and reproducing stigma. Other authors have discussed that believing that people are individually responsible for their excess weight can be a cause of,<sup>9</sup> and also an excuse for,<sup>10</sup> negative attitudes towards people who are overweight.

Academic and clinical biomedical discourses also commonly involve talking about overweight and obesity as contributing to, or causing, many health problems, including those that present to physical therapy. While, undoubtedly, excess body weight can contribute to some conditions, health related literature often exaggerates predictions of increased morbidity and mortality, and some unexpected findings suggest we need to consider this 'common knowledge' carefully<sup>11</sup>. For example, a systematic review including 2.88 million participants found people in the 'overweight' BMI category have a *lower* mortality rate than those in the 'normal' category, and people in the 'moderately obese' category have *the same* mortality rate as those in the 'normal' category.<sup>12</sup> Another extensive systematic review of 65 high quality epidemiological studies showed *no causal relationship* between weight and back pain, and only a *possible weak association*.<sup>13</sup> Similarly, a meta-analysis of the effect of weight loss on osteoarthritic knee pain demonstrated minimal effect of weight loss on pain scores.<sup>14</sup>

If some of healthcare professionals' main discourses are that weight is individually controllable and an extensive health problem, they are likely to employ certain clinical practices. For example, healthcare professionals may try to change individual patient behaviors rather than consider systemic issues,<sup>15</sup> and may give undue attention and resources to addressing bodyweight<sup>16</sup>.

Putting too much emphasis on weight as a health problem, and as individually controllable, may, in part, be due to weight stigma.<sup>17</sup> Weight stigma can be defined as negative attitudes towards people who are perceived to be overweight. These attitudes can result in people stereotyping those who are overweight as, for example, lazy, inactive, or unhealthy. Like other western cultures, this is true of general Australian attitudes<sup>18</sup>. This study particularly investigates institutional stigma<sup>19</sup> (stigma that is produced and perpetuated within an organised body of people – in this case physical therapy). While the focus of the study is not to determine where this stigma comes from, certainly weight stigma can come from the attitudes of the health professionals, or the perceptions of patients or a combination of both<sup>19</sup>. If people perceive themselves to be the target of weight stigma there are often adverse physical and psychological outcomes.<sup>20</sup> Patients who feel stigmatized for their weight by their physicians exercise less<sup>21</sup>, avoid health care appointments<sup>22</sup> and have more disordered eating<sup>23</sup>. For these reasons it is important that weight stigma is reduced. It is evident from two systematic reviews<sup>24,25</sup> that weight stigma interventions have had minimal success to date, and tend to focus on one contributing cause of weight stigma at a time. The minimal success suggests that the causes of weight stigma may be more complex than one element. In addition, other authors have suggested that to be successful such interventions in healthcare settings would need to consider the diversity and uniqueness of healthcare cultures.<sup>26,27</sup> This indicates that an in-depth investigation of the relevant healthcare culture (in this case physical therapy) would be important to reduce weight stigma.

As mentioned, researchers have not yet directly considered physical therapists' weight discourses. Findings from a survey of physical therapists' attitudes towards people who are overweight indicate physical therapists, in keeping with biomedical discourses, are likely to have simplistic understandings of weight, and may give undue clinical attention to weight.<sup>1</sup> Further, a study on patient perspectives showed patients expect physical therapists to judge them based on their body size.<sup>2</sup> Whether physical therapists are helping or harming patients with interactions involving weight has received little research attention. This is important from an ethical standpoint, given that physical therapy codes of conduct include 'do no harm'.<sup>28</sup> Attention to patients' weight by physical therapists is likely intended to improve outcomes by, for example, reducing the load on joints, discussing management of type II diabetes mellitus, or improving chronic pain. However, as noted,

weight is a sensitive topic, and those who experience weight stigma have poorer health outcomes than those who do not<sup>29</sup>. Therefore, interventions intended to improve patient health may result in harm if patients perceive them as stigmatizing. In order to consider whether physical therapy interactions involving weight are likely to have positive or negative clinical outcomes we posed the following research question: How do physical therapists speak about overweight and obesity in the context of their work?

## Methods

### *Theoretical approach*

Discourse analysis, the methodology employed in this study, provides a way of understanding how distinct patterns of thinking or talking about a topic (discourses) can be used by speakers to construct certain social or psychological practices<sup>30,31</sup>. Discourse analysis is a type of interpretive qualitative methodology,<sup>30</sup> that was a branch of the linguistic turn in social science where an analysis of language is seen as central to the way that people think and behave<sup>31</sup>. Discourse analysis has a constructionist epistemology<sup>32</sup> that posits the language we use constitutes, rather than simply reflects, our reality<sup>33</sup>. As such, discourse analysis does not attempt to find out what ‘really happened’, nor reconstruct people’s experiences. Instead, it looks at how these ways of talking make certain practices more likely.<sup>34</sup> More specifically, in this context, data were collected from focus groups and analyzed<sup>3,35</sup> to identify how participating physical therapists’ language creates or re-enforces certain ways of understanding body weight in their role as health professionals. Stigma can be produced in interactions through reproduction of certain discourses.<sup>36</sup> By analyzing the way physical therapists talk about larger patients, this project builds on previous research that has shown weight stigma amongst physical therapists<sup>1</sup>, and that some patients perceive weight stigma in a physical therapy context<sup>2</sup>, developing a picture of how physical therapists “construct” particular kinds of patients. While, of course, this project will not be able to demonstrate how physical therapists act, it will provide insight into weight stigma in physical therapy and has potential to inform ways to reduce it. Discourse analysis has been utilized elsewhere in health research<sup>(e.g.,37-39)</sup>, however, this method has rarely been used in physical therapy<sup>(e.g.,40)</sup>. Thus, in keeping with calls for different methodological approaches in physical therapy research<sup>41,42</sup>, discourse analysis offers a relatively novel approach to understanding physiotherapy.

### *Pilot*

A pilot study was conducted with a group of six physical therapists who were experienced clinicians from a variety of sub-disciplines. Following a review of the audio recording of the group discussion, minor changes were made to the focus group guide (Appendix 1) and demographic questions.

### *Participants*

In line with most developed countries, physical therapy in Australia is an integral part of the health system.<sup>43</sup> Australian physical therapists commonly work in both private and public settings and have considerable autonomy in assessing, diagnosing and treating relevant conditions.<sup>43</sup> All participants were qualified physical therapists currently residing in Australia who were available to attend a focus group in, or close to, the city of Brisbane. Participants were recruited via email and word of mouth invitations using professional networks, as well as by contacting interested participants from a previous study. Purposive sampling was used to ensure a diverse range of physical therapists (Table 1), including recruitment from a broad range of sub-disciplines, types of health service, work locations, and levels of experience.

### *Procedure*

Physical therapists participated in focus groups in October and November 2014 in physical therapy workplaces. Focus groups grounded in discourse analysis, are not designed to reach consensus, but rather to explore a range of ways of talking about a topic and facilitate understanding of ‘typical vocabulary and thinking patterns’ of the sample.<sup>44</sup> Physical therapy environments were chosen for the group discussions to evoke participant memory of clinical experiences.<sup>45</sup> The locations were: an urban musculoskeletal private practice (two groups), a hospital rehabilitation facility, an acute hospital setting, a rural musculoskeletal practice, and a physical therapy ‘laboratory’ in a university. The research team contacted potential participants by an introductory email outlining the topic and study design. The first author followed up interested participants by phone or email contact to determine convenient focus group locations and times. Recruitment ended when data reached saturation (i.e. when no new topics emerged).<sup>46</sup> Saturation was determined during recruitment because the data collection and recruitment processes occurred concurrently, and analysis was conducted iteratively during this time.

There were between four and six participants in each of the six semi-structured focus group session, and each ran for approximately one hour. Participants read an information sheet that included detailed explanation of the study and its potential risks, signed a consent form, and provided demographic information (Table 1) before commencing the study. The first author, who is trained in conducting focus groups, facilitated all groups and kept a reflexive diary during data collection. For more detail on the procedure during the focus groups see the focus group guide (Appendix A) and the *Materials* section below. All group discussions were audio recorded and transcribed verbatim. Participants’ confidentiality was protected by assigning pseudonyms in transcriptions and

data were handled within institutional data management guidelines. After the study, participants read debriefing information about what to do if they experienced distress as a result of participating in the study. The institutional ethics body granted ethical approval for the study. The research team took numerous steps to avoid influencing the results with the facilitator's views, including: use of open, broad introductory statements in participant communication such as 'weight in a physical therapy context'; minimising the facilitator's input into the focus groups; and reviewing recordings to exclude from analysis answers to any inadvertently leading questions. To encourage reflexivity the facilitator used a study diary and had critical discussions with the investigatory team and external experts. Further discussion of the possible influence of the facilitator on the results is presented in the discussion. *A priori* procedures for rigour and quality in qualitative research were instituted and followed as outlined in COREQ<sup>46</sup>.

**Table 1: Demographic characteristics of participants\*.**

Variable	Quantity
Total number of participants	27
Sex (female/male)	18/9
Age (y), mean (range)	39(23-72)
Years of experience, mean (range)	15(1-36)
Area of employment (city/rural)	23/4
Country of undergraduate physical therapy training:	
Australia	19
Singapore	2
Ireland	1
Scotland	1
Canada	1
New Zealand	1
Brazil	1
South Africa	1
Main sub-discipline:	
Rehabilitation (including neurology, geriatrics, orthopaedics)	4
Musculoskeletal (including sports)	11
Neurology	3
Rheumatology	1
Outpatients	1
Pediatrics	2
Orthopedics	3
General rotation	2
Main health sector:	
Public hospital	4
Private hospital	7
Public and private hospital	1
Private clinic	7
Community	1
Schools	1
Teaching and hospital or private clinic	3
Teaching	3
Participants with post graduate qualifications	12

\*The BMI of participants was not measured, however, most participants were likely 'underweight' or 'normal weight', with less than five likely to be considered 'overweight' or 'obese' by BMI category.

## Materials

The research team developed the question guide (Appendix A) from findings of previous studies of physical therapists and weight interactions<sup>1,2</sup>, as well as other existing literature on overweight and

obesity. Specifically, questions encouraged participants to discuss weight in the context of their work as physical therapists. Topics included: weight discussions with patients, perceived role of physical therapists in weight management, what it is like to treat patients who are overweight, causes of overweight or obesity, and how patients who are overweight might feel in a physical therapy environment. There was also opportunity for open discussion at the end of the session.

### *Data Analysis*

Transcripts generated from focus groups were analyzed using discourse analysis.<sup>31</sup> Specifically, the investigators analysed how physical therapists' language choices (discourses) create, re-enforce or legitimize certain ways of understanding weight. Analysis involved an iterative process of data examination and organisation in response to the research question. Following each focus group the facilitator (J.S.) noted down initial thoughts and reactions. J.S. then listened to the audio recordings and made open coding notes of discourses from these data. The same investigator (J.S.) then read verbatim transcripts to further refine these discourses. Another investigator (B.W.) then read the transcripts, and discourses were discussed until agreement was reached between the investigators. These first stages all took place iteratively during the data collection process. When data collection was complete, J.S. re-read the entire transcribed dataset several times crosschecking discourses across these data. J.S. manually coded these discourses into data management software under headings identified during analysis. These headings represented different discourses relating to the research questions and included both dominant and less common discourses. To enhance trustworthiness<sup>30</sup> of the results, the other investigators (B.W., M.G. and L.J.) reviewed the transcripts and the analysis. While J.S. is a physical therapist, these other investigators, from the disciplines of psychology (B.W., L.J), and human movement and nutrition sciences (M.G.), provided an external perspective. All investigators are experienced in qualitative research including discourse analysis. Discrepancies and new ideas were discussed until agreement was reached and integrated into the results. B.W., M.G. and L.J. confirmed the final analysis was a credible, reasonable interpretation and grounded in the data. Further efforts to ensure rigor and trustworthiness included providing a summary of findings to participants for feedback, peer review of the data analysis process, reporting of contradictory discourses, and review of results by two experts external to the research team.

### **Results**

The data analysis identified four main discourses. These discourses are discussed below, supported by quotations from the transcripts (with pseudonyms used). Table 2 presents a summary of the analysis, and includes a brief explanation of each discourse. The study design did not lend itself to statistical analysis of whether any of the participants' demographic, professional or physical

characteristics influenced their responses. However, discourses found in these data were relatively consistent across participants.

**Table 2: Results: overview and description of main discourses identified in the focus group data.**

Discourse <sup>†</sup>	Description
1. Patients who are overweight are little affected by stigma	Most participants demonstrated <i>some</i> understanding that larger patients might feel discomfort in physical therapy interactions. Around one third of participants had not considered how overweight patients might feel and had little or no idea that they might feel discomfort. This can be contrasted with other literature on weight stigma that indicates people who are overweight report often being affected by stigma, including in a healthcare context.
2. Patients who are overweight are difficult to treat	Participating physical therapists portrayed patients who are overweight as difficult to treat particularly in the areas of palpation, manual handling and sourcing of equipment.
3. Weight has simple causes (diet and exercise)	While some brief acknowledgement was usually given to the complexity of the determinants of weight, participants overwhelmingly placed emphasis on lifestyle factors as the causes of body size and the way to address it.
4. Weight is important in physical therapy	Weight was frequently talked about as: <ul style="list-style-type: none"> <li>• an important contributing factor to pain or illness experienced by patients</li> <li>• a factor that requires addressing</li> <li>• a factor that physical therapists should address</li> </ul>

<sup>†</sup>for the purpose of this study discourse is defined as: distinct ways of thinking or speaking

### *1: Patients who are overweight are little affected by stigma*

Participants often spoke about weight as a neutral attribute (i.e., not stigmatized) without the moral, social, and psychological implications of a stigmatized condition. This can be contrasted with findings from interviews with patients who more consistently portrayed their body weight as a stigmatized attribute in a physical therapy context<sup>2</sup>. Participants' framing of weight as a psychologically neutral topic was particularly evident in responses to a question regarding patient experiences of attending physical therapy. The following example demonstrates how participants in one group had never considered people who are overweight might feel uncomfortable entering a physical therapy environment:

*INT: "How do you think an overweight person might feel coming into a physiotherapy environment?"*

*((long pause))*

*INT: "If anything?"*

*((long pause))*

*ROGER: "I suppose that I, um, I don't know. I can't relate to it ....."*

*NICOLLA: "I don't know."*

*((GENERAL LAUGHTER))*

*ROGER: "Good summary."*

NICOLLA: *"I haven't thought about how they would feel coming to see me. Ever."*

JACQUI: *"I don't know that it would be a thing to single out to say obese people would feel different than non-obese people...."*

Other participants demonstrated an understanding that patients who are overweight might feel *some* discomfort in a physical therapy setting. These discourses portrayed weight as not psychologically neutral. For example, Renae identified the anxiety and fear of judgements patients have described in another study<sup>3</sup> coming into a physical therapy environment. Renae said: *"[patients who are overweight] might be a bit anxious about what we're going to make them do. Possibly that thought that they may be judged a bit about their size"*. Similarly, Lin identified potential discomfort in the open environments typical in many physical therapy settings. Lin considered that this discomfort could be significant enough to discourage patients from attending treatment.

*"if it's an open environment like this [a gym-like setting in a musculoskeletal clinic], and they have to exercise, say Pilates and things, where they have to be moving around and everyone's walking in and out and can see them, they may feel self-conscious about that perhaps. So you know, whether people don't come because of that..."*

The following two examples outline participant recollections of circumstances where they did not express sensitivity about weight when interacting with overweight patients. This included assuming their patients did not already know they were overweight. Both participants recalled negative reactions from these patients as a result:

ANTHONY: *"I became less and less subtle on the hint that she was excessively overweight. We're talking close on 180 kilos... in the end I basically said... 'you're fat, and you need to do something about it or you're not going to get rid of this problem'. She stormed out, refused to pay her bill...."*

JACOB: *"I only remember one who basically didn't like what I said and didn't want anything to do with me after that, which was fine but she was obviously in denial that she was overweight. And she was quite grossly overweight too so..."*

Overall, participating physical therapists' accounts appeared to lack the nuance and depth of patient descriptions Setchell et al<sup>2</sup> found in interviews with patients of physical therapists. While no formal comparative study has been conducted, Setchell et al's<sup>2</sup> thematic analysis of their interviews showed that patients consistently discussed discomfort and perceptions of judgment about their



weight as a result of physical therapists' communication styles, physical characteristics of clinics, and in physical therapy advertising and promotional material.

## *2: Patients who are overweight are difficult to treat*

Almost all participants spoke about working with people who are larger bodied as difficult. For example, participants used negative words including: *'dangerous', 'risky', 'hard', 'challenging',* and *'difficult'*. Three areas of perceived difficulty were most often discussed: palpation, manual handling, and sourcing of equipment. Julie said: *"I've found it really difficult... having my hands on people that are larger has definitely been challenging for me. I find it a lot harder to feel, and I do a lot of manual therapy too so I do move limbs a lot you know, and it's a lot harder"*. While Julie was a relatively inexperienced physical therapist, participants, regardless of their experience level frequently discussed manual handling and palpation as challenging with these patients. The groups also portrayed sourcing appropriate equipment as difficult. For example, Sahara, who worked in an acute hospital setting said: *"it's just more strain on resources and more time consuming, particularly if they're lower functioning, because you have to use all these other sort of equipment, like hoists"*

By contrast, a minority of participants described working with larger people as nothing out of the ordinary and something that could be managed with little difficulty within physical therapists' usual skillset. Hillary was one of the few participants who discussed treating overweight patients in this way. *"I just view it as another co-morbidity really. It's just another piece that potentially adds some complexity to it but it's not a major barrier. You just get on and do like you would with anyone."* These contrasting ways of talking about patients who are overweight invite consideration of the reasons for this variation, including whether portrayal of patients who are overweight as *'difficult'* is due to actual technical difficulty or due to weight stigma (or a combination of both). This is explored in the final section of this paper.

## *3: Weight has simple causes (diet and exercise)*

While participants frequently portrayed weight as primarily a consequence of lifestyle factors (i.e., diet and exercise), they also discussed other determinants of weight such as medications, hormones, and genetics. However, they gave these other factors comparatively little attention. The following conversation is a good example of the amount of attention given to lifestyle factors. In this discussion, Evelyn briefly mentioned that weight is complex but then focused on diet and exercise and, as was typical of most groups, others started to join in along this same line.

*“EVELYN: I think for just an average outpatient physio (a) you haven’t really got the time for it and (b) it starts to get complex but keep it basic. If they are hugely obese, a little bit more movement, a little bit less food, they’ll lose weight.*

*JACOB: That is exactly what I usually start with. Halve your portions and just continue exactly what you’re doing - - -*

*EVELYN: And go for a walk, yeah.*

*JACOB: - - - but halve your portions and if you can halve your portions for two weeks, if you don’t notice a difference, I’ll be surprised.”*

Another group followed a similar pattern. Roger had given a fairly nuanced discussion about the “very, very multifactorial” causes of weight including “a genetic component”, and “emotional” aspects. He summed this up by saying: “why a given person is overweight is completely individualistic really.” When the facilitator then asked “Does anyone else have anything to say about that?” others in the group, and Roger too, focussed in on lifestyle factors, even though these were only one of the factors originally discussed by Roger.

*“JACQUI: I think Roger said it when he said lifestyle.*

*UNIDENTIFIED FEMALE: Mm. (agreeing)*

*JACQUI: That sort of encompasses a lot of - all the different aspects of that single person and why people - yeah, why obesity is part of their life.*

*INT: What do other people think about that?*

*SIOBHAN: Yeah, I’d agree.*

*ROGER: Yeah.”*

Only one group gave more attention to contributors other than diet and exercise. Kaleb began by discussing a lifestyle factor (diet) as a big influence on weight. He then moved on to mention “the medical side of it” including medications, yet he ended his perspective back on lifestyle by saying: “the way I see it, it comes back to basics of diet and exercise”. However, the other participants steered the conversation back to discuss non-lifestyle contributors. Liam mentioned “personality” and “physiology”, Macy discussed “social and emotional factors”, and Renae discussed mental health. This group recognized and gave attention to the complexities of obesity.

#### *4: Weight is important in physical therapy*

Participants portrayed weight as an important factor in physical therapy in three ways: as a contributor to patients’ pain or illness, as something that requires addressing, and as something

physical therapists *should* address. For example, Jethro described weight as a significant contributor to back pain when he told the group what he commonly says to some patients: *“you do need to lose a few kilos, otherwise if you’re as heavy as you are your back’s gonna stay bad, and I can only help you so much and there’s got to come a point where there’s got to be less loading on your spine”*.

Later in the same group another participant, Jacob, was even more explicit: *“I’m actually pretty blunt in saying that if you don’t [lose weight], you’re not going to get the operation. You’re going to be in pain for the rest of your life and you’ll develop a hell of a lot of other problems so...”*. Groups used this focus on the importance of weight as a contributing factor to pain/illness to indicate that excess weight is something that requires addressing. This was particularly evident in participants’ choice of certain words in the quotes above. For example, Jethro used the word *“need”*, and both Jethro and Jason used the threat of negative consequences if their patients don’t lose weight: *“your back’s gonna stay bad”*, and *“You’re going to be in pain for the rest of your life...”*.

Most participants spoke about weight as something that *should* be addressed. For example, Jacqui said: *“I think somebody [i.e. physical therapists] has to take the responsibility of having that discussion with the patient.”* In the same focus group Siobhan concurred with this, saying: *“where it is an important factor to what’s going on with them, say an arthritic knee, we definitely have a role. Um we need to mention it...”*.

Focus group discussions also contained some counterpoint discourses to the portrayal of weight as important, although these were relatively uncommon. For example, some participants said that weight discussions were not always appropriate. Leon said:

*“We have to be careful as to not project that, I feel, onto patients while they’re here doing rehabilitation... it’s not the primary reason they’re here. The primary reason is their rehabilitation, so if we start projecting weight loss guidelines, information, education, then that can provide then a negative environment for the patient.”*

Neive outlined another circumstance where she learned that emphasizing weight loss was not appropriate, and changed her practice as a result:

*“I had a lady who was quite significantly overweight and she was in - I can’t remember exactly what but it was a surgical problem ... I was actually quite surprised when the dietician was ...*

saying: *‘well, actually while you’re in this stage of recovery, you don’t actually want to lose weight. It’s about your nutrition not necessarily... about weight loss as such’*”.

Evelyn portrayed weight discussions as not important for a different reason. She talked about how bringing up weight might be stating the obvious: *“most people are pretty realistic about what they actually look like”*. In another group, Jacqui described how some patients have explained this explicitly: *“you have patients that come in and say, ‘My doctor told me this and this person’s telling me this, and this person is, and I’m tired of hearing it’”*. Jacqui concluded that in these circumstances she would not discuss weight with the patient.

To summarize this fourth discourse, it was more common for participating physical therapists to foreground weight as their responsibility to discuss. What was less commonly talked about was that this might not always be appropriate. The tension between these two perspectives sometimes played out in discussions between different physical therapists in the groups and sometimes the same physical therapist contradicted their own previous statements. Thus highlighting some of the tensions and uncertainties about the role of the physical therapist in the area of weight management.

## **Discussion**

This study used a discourse analysis approach to understanding elements of weight related interactions in physical therapy practice. Results indicate that certain ways of talking about weight are common in physical therapy. These discourses make some ways of working as physical therapists more likely and, therefore, have implications for patient outcomes. Clinical implications are discussed below. First, however, the scope of application of the results is considered.

There are a number of considerations when interpreting and applying the findings discussed in this paper. As mentioned in the Method section, the first author took a number of steps to withhold her views from the focus groups. However, she is an experienced physical therapist, female, and thin, which may have had effects on the results. Having a group facilitator who is a physical therapist ‘insider’<sup>47</sup>, and is also thin, may mean participants would have been somewhat open about their experiences with patients, including possible negative attitudes towards those who are overweight. On the other hand, some participants may have had knowledge of the facilitator’s previous work on physical therapists and weight that may mean negative attitudes towards excess weight were not openly discussed. Efforts were made to reduce these effects by establishing an open environment where all views were respected. While this study was conducted in one area of Australia, and may not be entirely generalizable to different socio-cultural environments, it is likely to have

applications to physical therapy globally, considering international similarities within the profession<sup>43</sup>. Furthermore, as in many other countries, negative attitudes towards weight are common in Australia<sup>48</sup>, and Australian public discourses commonly refer to a rising prevalence of obesity, which is often labelled an ‘epidemic’<sup>11</sup>. Attempts were made to discuss topics broadly and to recruit a variety of physical therapists to increase breadth of relevance.

Clinical implications of findings are discussed below with each discourse considered separately:

*Patients who are overweight are little affected by stigma*

Many people who are seen as overweight are likely to have experienced persistent and ongoing stigma with considerable psychological outcomes<sup>49</sup>. A lack of consideration of the effects of weight stigma may mean physical therapists neglect psychological, moral, or social implications of interactions involving weight. As a result, physical therapists may not prioritize communication skills that are important in such psychologically sensitive situations. This has implications for the patient-therapist interaction and could lead to negative health outcomes for the patient.<sup>50</sup> Other research discusses a lack of a patient-centred approach in physical therapy<sup>51</sup>. The lack of awareness of stigma, however, can be understood as an additional element of this lack of patient centred approach, and contributes a novel aspect to an understanding of weight stigma in physical therapy. While weight stigma had been found to be an element in physical therapy in a study of patient perspectives,<sup>2</sup> it was unknown whether physical therapists were aware of this. Lack of awareness of weight stigma might appear surprising given that weight stigma is widespread,<sup>52</sup> and has been identified as a particular issue in health<sup>53</sup>. However, this may in part be due to it being a relatively newly recognised stigma that has not always been present in most cultures.<sup>52</sup> Education about minimizing weight stigma may present a way forward to improve patient outcomes and perceptions of physical therapy.

*Patients who are overweight are difficult to treat*

Most participating physical therapists portrayed patients who are overweight as difficult to treat. This is also a novel finding and has significance because seeing something as difficult may make it more challenging than it otherwise might be<sup>54</sup>. It may change physical therapists’ attitudes towards the task or make them reluctant to undertake the task. This discourse of difficulty could result from a lack of appropriate manual skills and training, or there may be an attitudinal cause or a combination of both. If due to a lack of skills, the results of this study indicate this could be addressed by education to improve technical skills to manage larger bodies including palpation, manual handling, and purchase of equipment. However, if the underlying reason for this portrayal of treatment of larger patients as difficult is attitudinal (and this is consistent with the blame and moral judgment discussed elsewhere<sup>11</sup>) it could be the result of stigma. This can be seen in that the

same language is unlikely to be applied as consistently to a pregnant woman, for example, who may also be ‘difficult to treat’ but is unlikely to be talked about in the same way. These attitudes could be addressed in education about weight stigma. It is of note that some participating physical therapists did not portray treating overweight patients as difficult. Their perspectives may help to highlight a way forward for physical therapists to develop more positive understandings of working with people who are larger bodied.

#### *Weight has simple causes (diet and exercise)*

Finding simplistic understandings of the determinants of weight, that emphasize mainly diet and exercise, is not new. This has also been demonstrated in a quantitative study of physical therapists’ attitudes.<sup>1</sup> Focus on diet and exercise has a number of implications. First, other causes of weight<sup>8</sup> may not be investigated, which may have negative health implications. Second, patients may be set up for failure, because using diet and exercise to change weight has demonstrated minimal efficacy to date<sup>7</sup>. Third, one of the elements of weight stigma is blaming people for their weight by automatically assigning weight causes to those that are individually controllable<sup>55</sup>. As a result, patients may perceive that they are the target of weight stigma if these causes are given emphasis. Overall, clinical implications of this discourse may include poorer health outcomes due to potential misdiagnosis, patient sense of failure, perceived weight stigma, and reduced rapport. Changing assumptions that diet and exercise are the main causes of weight can help to avoid these negative outcomes.

#### *Weight is important in physical therapy*

The results suggest that physical therapists talk about weight as important to address and they feel like they should be ‘doing their bit’ to ‘combat obesity’. Clinically this may mean there may be an overemphasis on weight that could come at the expense of patient rapport, or may draw attention from other important presenting issues. As outlined in more detail in the introduction, while excessive weight undoubtedly contributes to some physical therapy conditions, evidence does not support its contribution in many instances<sup>11-14</sup>. As a result, physical therapists need to be careful about how they prioritize weight management as part of their strategies to address presenting problems. This could include a greater awareness of when physical therapists (individually or as a profession) perpetuate discourses that seek to ‘normalize’ patients’ bodies<sup>56</sup>, as distinguished from engaging with patients who wish to consider weight management as part of collaboratively established goals.

To summarize, the four weight discourses found in this study are likely to encourage some problematic clinical practices. These include: not being prepared to negotiate the psychological aspects of possible weight stigma, not feeling competent and confident working with patients who

are overweight, primary emphasis on diet and exercise to change weight, and over consideration of weight. The clinical repercussions of these ways of thinking about weight may negatively affect interactions with patients and as a result compromise health outcomes for patients. However, results were not without ambivalence and alternate discourses could provide other ways of thinking about weight with more positive clinical outcomes.

Other authors have investigated the socio-political factors that underpin the development of dominant ways of talking about weight that are reflected in these physical therapy discourses. In depth discussion of these is beyond the scope of this paper, which prioritizes practical implications. However, as these underlying factors may limit the ability to change practice, some are outlined here briefly. Gard and Wright<sup>11</sup>, and Lupton<sup>10</sup> examine the moral imperative underlying dominant medical ways of thinking and talking about weight, similar to those found in this study. These authors show how overweight and obesity can be understood as ‘failure’ in a contemporary socio-political environment that upholds the importance of individual rather than institutional responsibility. The first discourse in this study, in which physical therapists talk about weight as ‘neutral’, can be seen as part of a larger medical discourse that positions the health professional as the ‘objective observer’<sup>17</sup>, free from moral judgment or other subjectivity. Physical therapists also generally adhere to a biomedical, mechanistic view of the body that suits simplistic understandings rather than subjective experiences of living in a body.<sup>56</sup> Findings of this study indicate that to suit the needs of patients who are overweight, a biomedical view is insufficient, and an understanding of the psycho-socio-political implications of bodies is required. Trede<sup>57</sup> suggests a way forward is to acknowledge and reflect on our subjectivity as physical therapists. Trede<sup>57</sup> also discusses the lack of a truly collaborative approach in physical therapy that may explain why weight stigma and judgment about the causes of weight go unchecked. Thus, for enduring changes to our way of thinking about weight it may also be important to adjust our worldview and *modus operandi* as physical therapists.

The results of this study give an indication of a way forward to improve outcomes for patients in physical therapy interactions involving weight. Physical therapists could benefit from a more comprehensive understanding of how patients who are overweight might feel in a physical therapy setting, to inform their interactions with patients. Further, results suggest greater emphasis should be placed on the multifactorial nature of the determinants of weight beyond diet and exercise so other health factors are not overlooked, and patients do not feel judged. Considering it is likely most physical therapists will work with patients who are overweight or obese, it is important to find ways to reframe discourses portraying larger patients as ‘difficult’ that were particularly pervasive in

discussions about palpation, manual handling, and sourcing equipment. Finally, it is important to consider when to prioritize inclusion of weight management in treatment of presenting problems or holistic practice to ensure weight stigma does not reduce positive outcomes for patients. To address these issues education should encompass complex understandings of weight and its associated stigma.



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## **Chapter 7: (Re)thinking weight-related interactions in physiotherapy.**

In the findings presented in Chapter 6, participating physiotherapists often reproduced hegemonic discourses about weight that create stigma. Weight was talked about as being the responsibility of the patient, as necessarily unhealthy, and as a cause of many physiotherapy conditions. Seen from a post-structuralist perspective, these discourses produce certain “truths” in relation to my research topic including: people who are overweight are to blame for their body size; weight is necessarily unhealthy; fatness must be “managed” in physiotherapy, and patients who are seen as overweight are difficult. I suggest that this means that physiotherapists often created a “normal” to which fat patients do not adhere. This aligns with patients’ perspectives presented in Chapter 5, where this “normal” was notable in patients’ discussions of physiotherapy interactions, environment and branding. Furthermore, I would argue that this defining of “normal” is legitimised institutionally by physiotherapists and gives them authority to discipline fat bodies. However, some physiotherapists and patients resisted this dominant construction of truth. In the language used by these participants, fatness can be seen as due to many causes (including those that are not individually controllable), fatness is not necessarily equated to ill-health, and fat people can be seen outside of stereotyped qualities. I suggest that the different constructions of these participants highlight that there are possibilities to reassess and broaden the hegemonic constrained “truth” about weight.

The remainder of this chapter is in the form of a manuscript that is currently undergoing peer review with the journal *Physiotherapy Theory and Practice*. Additional information about the research in this chapter is provided in Appendices D1-5. This information includes the recruitment materials, participant information sheet, demographic form, consent form, group session guide, diary and debrief. In this paper I investigated the possibility of reassessing weight “truths” in physiotherapy in the final empirical study of my thesis. In particular, I investigated how weight stigma, with its embodied, social, cultural, power and political elements, could be reduced. I investigated this type of (re)thinking from theoretical and empirical perspectives. Some of the theory explored in this study was outlined in Chapters 2 and 3. As a result, there is some repetition of these chapters in the “Theoretical exploration of rethinking weight stigma” section of the paper. However, within this section of the paper there is also a more detailed critical investigation of weight stigma interventions that was only briefly discussed earlier.

Setchell, J., Gard, M., Jones, L., & Watson, B. (under review) Addressing weight stigma in physiotherapy: Development of a theory driven approach to rethinking weight related interactions. *Physiotherapy Theory and Practice*.

**Addressing weight stigma in physiotherapy: Development of a theory driven approach to rethinking weight related interactions.**

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## ABSTRACT

Weight stigma has been identified in physiotherapists in empirical investigations. However, there has been little consideration of how this stigma might be addressed. We propose a theory driven approach to developing interventions for reducing weight stigma in physiotherapy and discuss the design and exploratory trial of such an intervention. We highlight Goffman's work on stigma that provides social and embodied understandings of stigma. Goffman's approach however, is notably apolitical, ahistorical and lacks mechanisms for understanding power. We suggest post-structuralist perspectives can provide insight into these areas. Drawing on these theories we critically examine the literature on weight stigma reduction, finding that trials have largely been unsuccessful. We argue this may be due to overly passive and simplistic intervention designs. As context specific understandings are desirable, we examine the nature of physiotherapy to determine what might be relevant to rethinking weight in this profession. We then discuss the development of a multifactorial, active weight stigma intervention we trialed with eight physiotherapists. Supported by theory, the outcomes of the exploratory study suggest that physiotherapy specific factors such as fostering professional reflexivity and improving understandings of stigma need to be incorporated into an active intervention that considers the complex determinants of weight stigma.

## INTRODUCTION AND OVERVIEW

Weight stigma has been identified as an area of concern in physiotherapy (Setchell, Watson, Jones, and Gard, 2015a, 2015b; Setchell et al, 2014). In this paper we are interested in exploring ways to rethink weight related interactions in physiotherapy. We propose a theory driven approach to developing an intervention to reduce weight stigma and discuss the design and exploratory trial of this intervention. The paper is written in two sections. In the first section we explore relevant theory. Theory driven approaches allow for consideration of both the broad, conceptual principles that govern the production of stigma, as well as specific elements relevant in the physiotherapy context. We propose that it is helpful to draw from, and inter-relate, three bodies of literature to do this. The first is literature examining stigma broadly, exploring what stigma is, and how it is constituted and produced. We then examine weight stigma specifically, and apply stigma theory to critically examine weight stigma reduction interventions that have already been trialled. Finally, in the light of the theory we have discussed, we examine the context of the physiotherapy profession. Here we discuss particular factors endemic to this profession that might bring weight stigma into greater focus or salience. As a result, we highlight possible directions for a rethinking of weight related interactions in physiotherapy.

In the second section we outline our development of a weight stigma reduction intervention based on this theoretical exposé. While this development includes an empirical investigation of the intervention, the focus in this paper is a description of the process rather than being a ‘trial of an intervention’ per se. For this reason, the ‘trial’ is treated as exploratory, with points of interest presented, rather than a formal method and results. We conclude by considering the applicability of this theoretical and empirical research to physiotherapy.

## THEORETICAL EXPLORATION OF RETHINKING WEIGHT STIGMA

In this section we discuss and draw together theory on stigma, weight stigma and physiotherapy to provide insight into possible options for (re)visioning physiotherapy interactions that involve body weight.

### Stigma

Much of the thinking about stigma in the last half century has been based on the seminal work of sociologist Erving Goffman (Link and Phelan, 2006). Through ethnographic explorations of mainly interpersonal interactions, Goffman described stigma as an “*attribute that is deeply discrediting*” (p. 13) that marks a spoilt identity (Goffman, 1963). He notes that when someone is stigmatised they are “*reduced in our minds from a whole and usual person to a tainted, discounted one*” (Goffman, 1963, p. 12). In this way stigma involves stereotypes, where a person is assumed to have



(often negative) attributes on the basis of a stigmatised characteristic (Bos, Pryor, Reeder, and Stutterheim, 2013). These assumptions often lead to discrimination and may, at times dramatically, limit the life chances of the stigmatised person (Link and Phelan, 2006). Stigma, according to Goffman, should be seen as a social process, even if it is only directed at one person, as the person's individual characteristics matter less than the social markers of stigma (Brown, 2010). For the purposes of this paper the social context of interest is physiotherapy.

Goffman focused closely on the embodied and 'felt' aspects of stigma (Hannem, 2012). He described, for example, the suicidal ideation of a young woman with facial disfigurement, the "*anxious unanchoring*" (p. 29) felt by someone with visible stigma anticipating social situations, and also the positive elements of a new perceptiveness that may come from experiencing stigma (Goffman, 1963). From his quotations from people who have experienced stigma, his readers can feel the fleshy presence of the stigmatised body. For example, Goffman (1963) outlined an experience of someone looking in the mirror after recovery from physical trauma: "*It was there, it was there, it was real. Every one of these encounters [with himself in the mirror] was like a blow on the head*" (p. 19). Thus, for Goffman, and many social psychologists and sociologists that refined and built on his work, stigma was an experience where bodies and feelings were important. Embodied elements of stigma seem relevant to explore in this paper, as bodies are integral to both fatness and physiotherapy (see below). As identified in the previous paragraph, Goffman also highlights that stigma is produced through social interaction, rather than residing within the stigmatised person or characteristic itself.

While approaches to stigma based on Goffman's work can explain some aspects of stigma, they lack mechanisms to understand the effects of broader social, political, cultural or historical variations on stigma. This has led to some authors suggesting that the concept of stigma should be abandoned (Oliver, 1992) or rethought (Farrugia, 2009; Hacking, 2011; Hannem, 2012). We agree with authors who have rethought stigma as a useful concept using a post-structural perspective to contextualise stigma. Prioritising a consideration of context is consistent with many other scholars in health and medicine who have turned to post-structuralist theorists to account for the political, cultural and historical dimensions of human experience in healthcare (Lupton, 2012b). However, few scholars have looked specifically at stigma in this way in a health context (Hacking and Farrugia are two notable exceptions). Investigating stigma associated with autism spectrum disorder, Farrugia (2009) demonstrated that a post-structuralist approach can complement Goffman's understandings of stigma, while Hacking (2011) discussed how post-structuralist

approaches were insufficient without Goffman's applied approaches in discussing face-to-face clinical interactions.

The influential post-structuralist philosopher Michel Foucault considered behaviour, interactions and feelings to be produced through particular ways of thinking which he called discourses. He saw discourses as created not only by social context, as per Goffman, but also the political, cultural and historical context (Foucault, 1977a, 1978a). This view suggests that stigma is not finite or static but may be (re)constructed in varying environments (Tuffin, 2004). As Hannem (2012) suggests, post-structuralism provides insight into how stigma is produced or (re)created in different situations, and can provide opportunities to rethink the way we conceptualise people with stigmatised conditions. Later in this paper we apply these concepts to the topics of physiotherapy and weight stigma, and their intersection.

Goffman's approach also does not provide a way to understand the influence of power in stigma. Link and Phelan (2001), in line with post-structuralist thought, argue that "*stigmatization is entirely contingent on access to social, economic and political power that allows the identification of differentness, the construction of stereotypes*" (p. 367). Stigma is thus often associated with broader social inequities (Tuffin, 2004). As other authors have suggested, Foucault's broad theories on the production of truth, knowledge and power can be helpful to understand the power involved in stigma (Farrugia, 2009; Hacking, 2011; Hannem, 2012). In his work on governmentality, Foucault argued that power and governance (including governance of what is 'not normal') are exercised not only by the state and its institutions such as the army and police, but also in other institutions that are not traditionally seen as exercising power (Foucault, 1979). Foucault examined, for example, educational institutions, psychiatry and medicine (Foucault, 1977a, 1978a). In this paper, we apply this thinking to the institution of physiotherapy. Hannem (2012) discussed the relevance of Foucault's governmentality to stigma. She noted that stigma in an institutional setting comes from the institutionalisation of ways of managing the perceived risk of a stigmatised attribute. She argues that often the intent of the institution is overtly to help, yet "*when the need for assistance is justified by the inherently "different," "risky" or "tainted" characteristics of the population, stigma is created in the very agencies that are supposed to be providing help*" (Hannem, 2012, p. 25).

Foucault argued that the production of 'truth' is intimately linked with power (Foucault, 1977a). Institutions, including physiotherapy, produce truths about what is considered 'normal' (Nicholls and Gibson, 2010). Producing a 'normal' also necessarily creates an 'abnormal'. Defining 'abnormal' or 'deviant' attributes provides the conditions where attributes can become stigmatised

as the 'spoiled' identities described by Goffman (Farrugia, 2009). Foucault described how people who are seen as abnormal are often 'disciplined' to become more 'normal' (Foucault, 1978b) P42-57. This discipline is an element of stigma.

Foucault used the concept of 'discipline' to talk about power that pervades many types of interactions, including the seemingly mundane. He theorised that people discipline themselves or others to become 'productive citizens' to support the 'greater good' of society (Foucault, 1978b) P42-57. Thus a person can be seen as unproductive or expensive if they are seen as having attributes or behaviours that may be costly to society. Such people can then be held individually accountable for this lack of productivity. If we apply Foucault's 'behaviour or conduct' to management of the body, the body can be seen as 'unproductive' or 'expensive'. As a result there may appear to be justification for 'disciplining' or exerting power over such a person to try to change them to be more 'productive'. In this way power is interwoven into some forms of stigma (disease, deformity, disability and weight stigmas are examples of this), where the stigmatised condition is seen as economic 'waste'. It is important to note, however, that this power moves in both directions; people who are stigmatised can resist against individuals or institutions (Foucault, 1977b).

To summarise, we have used aspects of dominant understandings of stigma, as outlined by Goffman, to identify that stigma is social and embodied. We have extended this theory using post-structuralist perspectives that provide an understanding of the involvement of power in stigma, where people/institutions produce 'truths' about what is 'normal' and employ 'disciplining' practices and beliefs to those considered 'not normal'. Furthermore, post-structuralist perspectives highlight that stigma is socially, politically and historically constructed. By extension then, stigma must invariably 'suit the times' and fit in well with hegemonic local and/or global beliefs, and is in fact created by them. As a result, to be stigmatising is, in some ways, to be a 'good citizen'. This means that stigma is likely to be difficult to change because it is supported and reinforced by much of society.

To reduce stigma, its fundamental causes must be addressed. This includes considering its production by socio-political-cultural contexts. For example, while the nature of 'successful' racism reduction interventions is far from uncontroversial, it is generally acknowledged that attempting to reduce racism requires complex and socially embedded interventions (e.g., see Paluck and Green, 2009). Similarly, health related stigma (such as that associated with HIV status) requires interventions that are multi-level and targeted at a number of elements of stigma (Heijnders and

Van Der Meij, 2006). However, Goffman closes his seminal work on stigma by noting that while stigmas have commonalities, it is important to consider how they differ (Goffman, 1963). Link and Phelan (2001) also note that different conditions may be stigmatised in different ways. For example, the visibility and perceived controllability of the attribute affects the extent and form of discrimination (Hogg and Cooper, 2003). We turn now to explore weight stigma specifically, and the literature on reducing weight stigma.

### Weight stigma

*Weight* stigma, according to Goffman, is the discrediting of a person because they are seen as overweight or obese<sup>1</sup>. As noted in the previous section, post-structural perspectives highlight that weight stigma is socially, politically and historically situated *and* constructed. Power is also involved, as people may stigmatise others for being overweight by employing ‘disciplining practices’ in institutional and interpersonal contexts (Foucault, 1978b), because many people see weight as a controllable characteristic (Puhl and Heuer, 2009). Weight is also a highly visible characteristic making the embodied elements of stigma, highlighted by Goffman, salient. These aspects of weight stigma may have a certain relevance to the physiotherapy context, as discussed in the next section.

Weight stigma is not a new phenomenon, appearing numerous times in historical discourses (Gilman, 2008). However, these negative attitudes are relatively newly recreated and intensified in the current sociopolitical climate. There is now considerable literature that maps the pervasiveness (Puhl et al, 2015) and increasing prevalence (Andreyeva, Puhl, and Brownell, 2008; Tomiyama et al, 2015) of weight stigma across a number of cultural settings. While most studies have been conducted in developed countries, a smaller amount of literature has shown weight stigmatisation is becoming increasingly common globally (Brewis, Wutich, Falletta-Cowden, and Rodriguez-Soto, 2011). Weight stigma is more common towards women (Monaghan and Malson, 2013; Tiggemann and Rothblum, 1988; Wee et al, 2014), and intersects in particular ways with other stigmatised conditions such as race (Wee et al, 2014), and sexual preference (McPhail and Bombak, 2014). Weight stigma has been documented extensively in the past decade in numerous health professionals including doctors, nurses, exercise scientists, and dieticians (Puhl and Heuer, 2009). Weight stigma has also been reported in physiotherapists (Sack et al, 2009; Setchell, Watson, Jones, and Gard, 2015a, 2015b; Setchell et al, 2014) and physiotherapy students (Awotidebe and Phillips, 2009).

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<sup>1</sup>There can be stigma associated with being seen as underweight but this has a different socio-political context and is not the focus of this paper.

Post-structuralist perspectives, as outlined in the previous section on stigma, provide an opportunity to understand the socio-political reasons behind this current intensification of weight stigma, and may help provide some guidance as to how to reduce it. There are a number of potential explanations for the increase in weight stigma. For example, a number of authors have argued that one reason is increasing medicalisation, where attributes (including fatness) that were not previously considered ‘an illness’ become the subject of medical attention (Gard and Wright, 2005; Lupton, 2012a, 2012b; Murray, 2008). Here, as discussed in the previous section, the construction of ‘truth’ as relevant to stigma comes into play. Fatness has been constructed by medical discourses as abnormal. For example, Murray (2007) discusses medical constructions of fatness as ‘deviance’, and Tischner and Malson (2012) demonstrate that health approaches to ‘obesity’ often present fatness as ‘failing’. Physiotherapy discourses also construct fatness in a similar way (see the next section), particularly in the context of the profession’s increasing interest in public health.

Another likely prevailing political context behind the recent intensification of weight stigma is the global rise of moral agendas based on individualistic and economically rationalised ways of thinking (often called ‘neoliberalism’). In neoliberal societies, individual responsibility and self-regulation (as opposed to institutional or governmental responsibility) are upheld as important moral imperatives (Foucault, 1979). Foucault’s work on governmentality and biopolitics details how economic rationalism has been extended beyond its original application to politics and economics and is now often applied to all aspects of daily life (Foucault, 1979). When writing on the ‘obesity epidemic’, Wright and Harwood (2012) explain how governmentality “*places individuals and populations under surveillance*” (p. 2). This economic surveillance is frequently directed towards the fat body and can be seen in medical literature where, for example, the perceived financial costs are given as the rationale for reducing obesity in individuals or populations (Campos et al, 2006). Weight stigma (or the disciplining of fat bodies) is therefore the ‘correct response’ to the currently championed individualism, whereby people are increasingly seen as responsible for their own health and its presumed effect on societal wellbeing. As a result, people with so called ‘lifestyle diseases’ (i.e. what are seen as controllable diseases), including ‘obesity’, are constructed as failing because they are seen as making harmful choices (Guthman, 2009). This practice of economic rationalisation of bodies goes some way to explaining why the perceived controllability of weight mentioned above, is such a point of focus for those seeking to reduce weight stigma. In summary, prevailing political, social and cultural circumstances have produced an increased prevalence and an intensification of weight stigma.

Given the current pervasiveness of weight stigma it is not surprising that a number of studies have been undertaken to try to reduce this form of stigma, many of them in a healthcare context. There is, as yet, no literature on this topic specific to physiotherapy. Weight stigma reduction researchers (understandably) focus interventions on what they believe to be the underlying cause of weight stigma. A systematic review by Daníelsdóttir, O'Brien, and Ciao (2010) found only 16 weight stigma intervention studies. These authors concluded that: *"The lack of prejudice reduction following most interventions suggests that psychological mechanisms other than, or additional to, those being manipulated may underpin anti-fat prejudice"* (p. 47), and called for more 'field based studies' to allow for assessment of 'real world efficacy' of attitude/behaviour changes. Since Daníelsdóttir and colleague's study, one other review has been published. Lee, Ata, and Brannick (2014) conducted a meta-analysis of 29 weight stigma interventions. Interestingly, these authors found that researchers continued to focus on the same three main mechanisms that Daníelsdóttir and colleagues reported had little success in reducing weight stigma. These were controllability, empathy and social consensus. Researchers focusing on **controllability** set out to change the belief that fatness is caused by individually controllable factors (i.e., diet and exercise). Understandably, given Goffman's theories on the 'felt' and embodied nature of stigma, some interventions focused on improving **empathy** for fat people. The third main approach to stigma used the concept of **social consensus**, whereby researchers set up circumstances where people believed that the social consensus was that fat was not seen negatively in order to determine if this might reduce stigma. Some studies did focus outside of these three main mechanisms of weight stigma, looking at, for example, size acceptance training, positive or negative news reporting of fat bodies and cognitive dissonance-based interventions. Lee and colleague's results were remarkably similar to the earlier review, finding small significant effects and no notable difference between intervention types. In both systematic reviews, interventions were almost exclusively short term, such as one-off lab tests, single lectures or in-services, or web-based training.

We now discuss what we see as two main problems with most of these interventions. The first relates to the causes of stigma. The second relates to the strategies used to implement these interventions. Regarding the mechanisms or causes of stigma, we find it concerning that most of these studies investigated *one main cause of weight stigma*: an attempt to find a 'holy grail'. If we return to the theoretical understandings of stigma outlined earlier in this paper it is evident that stigmatising attitudes are likely to be considerably more complex. That is, if weight stigma is socially (historically, culturally, politically) embedded and *created*, it follows that stigma is part of a complex net of moral norms. As a result, changing weight stigma is unlikely to be simple. To recognise this, we suggest that it may be time to abandon the search for a main cause of weight

stigma. Instead, it might be beneficial to create opportunities for a more complex integration of many or most causes of weight stigma. Using post-structuralist thinking we can recognise this multiplicity and, rather than creating an intervention that is structured around one singular cause of weight stigma, we can consider that all or most ‘causes’ are relevant. We then open up the possibility of using a variable combination of these factors in weight stigma interventions, depending on what is most relevant to the particular context. We could then address stigma as situated, as Foucault would see it, and as embodied and social, as Goffman would see it.

The second issue is that interventions to date have looked to a relatively narrow mode of delivery. Again, considering the complexity of weight stigma’s integration with hegemonic moral norms, it seems unsurprising that these interventions have little lasting effect. Extensive literature on the difficulty of changing attitudes more broadly (Potter and Wetherell, 1987), as well as pedagogical theory (Giroux, 1988) also support this argument that a short, passive intervention is unlikely to have long term effects. Recent physiotherapy research also supports complex and embedded methods of learning (Patton, Higgs, and Smith, 2013). One of the interventions in Lee and colleague’s 2014 meta-analysis used a complex set of causes, just as we advocate in the paragraph above. Yet the study was a one-off, passive intervention (viewing films) and had no sustained effect on weight stigma (Swift et al, 2012). Another study by Kushner, Zeiss, Feinglass, and Yelen (2014) delivered a more active intervention. Participants (medical students) read a paper on communication issues about weight and weight stigma, participated in a role-playing exercise followed by a facilitated reflection. Weight stigma was reduced in the short term but returned to normal after a year (Kushner, Zeiss, Feinglass, and Yelen, 2014). Therefore, while this was more involved than most weight stigma interventions, perhaps it was insufficiently prolonged or repeated.

In considering both of these issues with weight stigma interventions we can perhaps learn some lessons from the similarities between stigmatised conditions that Goffman highlighted (Goffman, 1963). We mentioned earlier that reduction of other types of stigma (such as racism, and HIV related stigma) required complex and embedded interventions. MacKean and GermAnn (2013) highlight this in their discussion of findings from an in-depth investigation of literature relevant to weight stigma reduction in healthcare: *“Any approach to creating change must address the fundamental causes of stigma – that is, it must address the deeply held attitudes and beliefs of powerful groups that lead to stereotyping, setting apart, devaluating and discrimination, or it must change the circumstances so as to limit the power of such groups to make their views the dominant ones”* (p. 5). As outlined in the previous section, while it is helpful to look at studies on other types of stigma reduction it is important to remember that in many ways stigmas are specific. For

example, the ‘immersion’ and contact hypothesis type interventions that may work in some circumstances to reduce racism (Amir, 1969) seems to have the opposite effect on weight stigma (Alperin et al, 2014). So while we can learn some general concepts, such as the need for complexity and depth, from the reduction of other forms of stigma we also need to consider the nuances of weight stigma as outlined throughout this section.

Furthermore, as we argued earlier, stigma is situated and created socially, culturally and politically. It therefore follows that it is important to investigate the context in which one wishes to reduce that stigma. Expanding on the theory we have explored so far in this paper we now conclude this theoretical section by considering what might make weight stigma salient in a physiotherapy context.

### Physiotherapy and weight

Empirical research has identified that physiotherapists have weight stigmatising attitudes (Sack et al, 2009; Setchell et al, 2014). This research has shown that physiotherapists tend to stereotype people who are overweight, with over 50% agreeing with statements about people who are overweight being sloppy, unattractive, weak willed, non-compliant and awkward (Sack et al, 2009). Research on physiotherapists’ attitudes also indicates probable dislike and blame of people who are overweight, as well as a fear of becoming overweight themselves (Setchell et al, 2014). In these ways physiotherapists reproduce individualising and blaming discourses about weight similar to those held in the general population and in other health professions. However, knowing that physiotherapists have these attitudes does not necessarily help us to understand how they might play out in the particular context of physiotherapy. Some factors may make weight stigma particularly salient and consequential in physiotherapy. This may mean that to reduce weight stigma in physiotherapy it is likely to be beneficial to consider certain elements of the profession.

To state what might appear obvious, but is often overlooked, physiotherapy is inherently about the body (Nicholls and Gibson, 2010). Amongst other things, bodies are observed, touched, lifted, supported, measured and moved during physiotherapy. When considering the fleshy embodied nature of stigma as understood through Goffman, this factor in itself brings a certain salience to weight in physiotherapy contexts. For example, as patients of physiotherapists themselves have mentioned, rolls of fat might suddenly seem more obvious when the body is touched or observed in physiotherapy (Setchell, Watson, Jones, and Gard, 2015b). Of importance here is that physiotherapy comes from a largely positivist perspective that views the body biomechanically (i.e., like a machine), and the physiotherapist as a ‘neutral observer’. Physiotherapists generally seek



normalisation of the body, for example, its patterns of movement or joint range (Nicholls and Gibson, 2010). Power is relevant here, as this process establishes an ostensibly neutral ‘expert status’ of the physiotherapist and constructs a ‘truth’ that may not align with patients’ perspectives (Eisenberg, 2012). Physiotherapists are also likely to apply this biomechanical, machine-like perspective to fatness as the profession increasingly considers elements of public health (Dean, 2009), including weight management (Snodgrass et al, 2014), to be part of its scope of practice. In keeping with weight stigmatising attitudes of blame outlined above, physiotherapists may ‘discipline’ the fat body with the objective of restoring a ‘normality’ that fits a biomechanical ‘truth’ such as simplistic diet versus exercise weight loss theories (Gard and Wright, 2005).

People seeking physiotherapy treatment consider the profession to be part of the health and fitness industries, both of which patients associate with negative attitudes towards weight (Setchell, Watson, Jones, and Gard, 2015b). Physiotherapists may inadvertently reinforce this belief by the use of images that privilege thin bodies, with visual displays of exercise equipment in their environments (Setchell, Watson, Jones, and Gard, 2015b) and possibly by disciplining their own bodies (Black et al, 2012; Dahl-Michelsen, 2014). Perhaps as a result of these factors, Setchell, Watson, Jones, and Gard (2015b) also found that patients expect and perceive that physiotherapists have negative attitudes towards ‘overweight’ bodies (weight stigma). The expectation of stigma means that patients might feel an “*anxious unanchoring*” (Goffman, 1963, p. 29) when coming into physiotherapy environments. This is of particular concern because another study shows that physiotherapists are often unaware of this potential discomfort of patients (Setchell, Watson, Jones, and Gard, 2015a). Here it may be relevant to note that the profession has been critiqued for lacking a tradition of reflexive understanding and analysis that would make stigma explicit and knowable (Clouder, 2000; Nicholls and Gibson, 2012; Trede, 2006). These findings highlight some specific considerations that may be important in a weight stigma intervention in the context of physiotherapy.

We now summarise the contribution of this theoretical section of the paper to considering how to reduce weight stigma in physiotherapy. Stigma involves embodied and social aspects and is complex and embedded (and created) in specific historical political and cultural settings. Weight stigma is pervasive and intricately embedded within current ways of thinking. There are many underlying mechanisms proposed to be creating a recent intensification of weight stigma. These include: perceiving weight as controllable, the medicalisation of fatness, social consensus, lack of empathy, and an economically rationalised ‘disciplining’ of the fat body. Interventions intended to reduce weight stigma have, to date, generally been unsuccessful. We propose that this lack of

success may be due to insufficient consideration of the complexity of weight stigma. This is evident in the lack of multiplicity in the causes addressed in interventions and the simplicity of the methods of intervention. Physiotherapy is one environment where weight may be particularly salient and consequential due to the profession's focus on bodies, its biomechanical viewpoint, its role as part of the health and fitness industries, and its lack of reflexivity. In conclusion, we suggest active strategies are employed in order to reduce this type of stigma in physiotherapy and that the complex nature of the contributors to weight stigma require consideration. Furthermore, interventions must address the specific environment in which weight stigma is situated: in this case physiotherapy. In the following section we introduce a process we designed for encouraging a rethinking of weight in physiotherapy, based on these theoretical understandings.

## EMPIRICAL EXPLORATION OF RETHINKING WEIGHT STIGMA

### Aims

We conducted an exploratory trial with eight physiotherapists based on action research principles. The purpose of the trial was to develop an intervention strategy that could incorporate the theoretical elements discussed in the first part of this paper. This process involved consideration of three broad aims. The *first aim* was to address the issue that weight stigma is unlikely to be reduced by trying to change only one causative factor. For this reason we designed the intervention to have sufficient time and flexibility to include relevant elements of both Goffman's and post-structuralist thinking on stigma. This meant the intervention was able to include embodied aspects of stigma (e.g. empathy, anticipation of potential discomfort), social aspects (e.g. communicating lack of judgment, understanding the impact of disrobing), and political-cultural-historical aspects (e.g. understanding the political construction of weight, understanding how weight stigma might vary according to circumstance). The *second aim* was to address another issue we identified earlier- that weight stigma is unlikely to change with a simple mode of delivery such as a one-off or passive input. As a result we devised an intervention that involved a variety of ways of learning, with the majority of the process being active and applied. We also ensured that learning opportunities were repeated over time. The *third aim* was to recognize the importance of context in stigma. As a result this trial was situated within physiotherapy environments.

### Methodology

We based the study design on the methodological approaches of action research. Like our trial, action research typically involves the researchers working with groups to facilitate changes through a participatory process that is grounded in experience (Kagan, Burton, and Siddiquee, 2008). This methodology does not necessarily employ a set method of data collection and often includes

elements of techniques such as focus groups, narrative enquiry and semi-structured interviews (e.g., Siddiquee and Kagan, 2006), thus providing the flexibility that we required to introduce a number of active methods in the intervention. Action research is broadly grounded in social constructionist epistemology where the nature of reality is assumed to be multiple (Kagan, Burton, and Siddiquee, 2008). It is therefore suited to exploring an intervention underpinned by the constructionist theoretical approaches to stigma we have discussed in this paper (Chamberlain, 2014). An action research based approach was also appropriate for our study as it has often been employed by researchers who are interested in addressing stigma and discrimination (Gough and McFadden, 2013). Consistent with our theoretical underpinnings we do not employ pre- or post-testing but qualitatively consider the journey of the participants throughout the study as an indication of the changes in the thinking and practice of the participants.

### Procedure

This paper is not intended to be a traditional write up of the results of an empirical intervention study. We view this trial as an integral part of producing an intervention. That is, the intervention was not only developed *a priori* but was adapted and developed as the process was carried out. As is integral to action research approaches (Gough and McFadden, 2013), participant and researcher boundaries were not fixed. ‘Participants’ gave feedback on the process and had some input into the study design. As a result, the eight physiotherapists who participated in this study were important to the development and trial of this intervention. We provide information on their characteristics in Table 1. ‘Participants’ were all qualified clinicians, who replied to an email from the first author seeking physiotherapists who were interested in undertaking a reflexive process to further their understanding of their practice. The second tier of recruitment was a follow up telephone conversation with the first author. Here the topic of interest was introduced as ‘exploring weight-related interactions in a physiotherapy setting’. Stigma was not discussed during recruitment. Participants gave written informed consent to involvement in the study and were given debriefing information after study completion. The main facilitator of the process was the first author, who is thin, white, middle aged and an experienced clinical musculoskeletal physiotherapist. The third author provided reflexive feedback during the trial. Institutional ethics approval was gained and all data were handled confidentially within institutional guidelines, including the use of pseudonyms for exemplar quotes given below.

Table 1. Participant demographic details

Age	Gender	Year Graduated	Country Grad	Physiotherapy qualifications	Years of practice	Main sub-discipline	sector	location
57	F	1979	Australia	Bpty	36	Manipulative physiotherapy, orthopaedic, men's health	private practice	urban
44	F	1992	Australia	Bpty(Hons) MPty (musc)	22	Musculoskeletal and women's health	private practice	urban
60	F	1975	Australia	Bpty	40	Outpatients	private practice	urban
41	M	2004	Australia	MPhysStud MSportsPhys	11	Musculoskeletal	private practice	urban
33	F	2003	England	BSc(Hons)Pty	12	Musculoskeletal outpatients	private practice	urban
28	F	2008	Australia	BPty Grad Dip Neuro Rehab	6.5	Neuro Rehab	public hospital	urban
44	M	2004	England	BSc(Hons)Pty	11	Musculoskeletal	public hospital	urban
37	M	2004	Australia	Mpty	10	Ortho-geriatrics	Both public & private	urban

The study spanned approximately three months, with the most intensive phase completed in the first six weeks. The project was situated within physiotherapy in a number of ways: 1) by ensuring that participating physiotherapists carried out much of the intervention in their own individual work environments, 2) by conducting group sessions in a physiotherapy setting (a private practice), and 3) by encouraging reflexivity about the profession and about the participants as individual physiotherapists. Structurally, the study involved three main components: group discussion, individual learning and reflection, and one-to-one discussions (see Table 2 for a visual representation of the process). We present our rationale for the inclusion of these components under each subheading below. Although we will discuss each component separately, it is important to note that they occurred iteratively and sometimes overlapped (Table 2).

Table 2 Structure of the study by week.

Week	Session	Reading	Diary
1	group	2 papers	Yes
2	-	-	Yes
3	-	-	Yes
4	group	1 paper	Yes
5	-	-	Yes
6	-	-	Yes
7	group/individual	-	-
8	-	-	-
9	-	-	-
10	-	-	-
11	-	-	-
12	-	-	-
13	-	-	-
14	individual	-	-

### Group discussion

Group discussions helped address all three aims of this intervention trial. They provided time (4-6hrs) to address the *first aim* of presenting many factors contributing to weight stigma. In keeping with the *second aim*, group discussions provided opportunities for active and dynamic forms of learning. We ran the sessions in an open plan section of a physiotherapy clinic amongst typical equipment such as plinths, strapping tape, and exercise apparatuses to help facilitate the *third aim* of keeping discussions contextualised. There were three opportunities for group discussions during this project, each two hours long and three weeks apart. We hoped that three weeks would provide sufficient time for participants to implement and reflect on changes in their work practices, yet not too much time to lose momentum. Participants could choose to have a one-to-one reflection session by telephone with the facilitator instead of the third group session (depending on the time they had available and their personal preference). The facilitator used semi-structured questions (Appendix A) to prompt conversation about pre-reading of existing material about weight stigma. In the first session there were two papers discussed: one concerned the attitudes of physiotherapists towards fatness (Setchell et al, 2014), and the other physiotherapists' main ways of talking about weight (Setchell, Watson, Jones, and Gard, 2015a). The second session involved discussion of any changes in practice that the participants had implemented, or considered implementing, during the previous three weeks, and further reflections on the topics introduced in the first session. A third paper was introduced during this session about patients' experiences of weight stigma in physiotherapy (Setchell, Watson, Jones, and Gard, 2015b). The facilitator generally provided little input other than to facilitate discussion. Occasionally, she provided more input when participants required more prompting to consider a particular point (see the 'reflections on aims' section below for more detail

on when extra input was needed). After the group discussions in both sessions, participants summarised the main points and used these points to facilitate individual reflection and planning (discussed below). Half of the participants chose a third group session with the others opting for one-to-one-phone calls (see below). No new literature was introduced for this final session, and discussion centered on changes to practice or new thoughts relevant to the research topic.

### Individual learning

Individual learning was encouraged in three ways. First, as mentioned in the previous section, participants read and responded individually to the three papers on weight stigma in physiotherapy. Second, during the group sessions participants responded independently in written format to discussions to develop individual ideas. Here, they developed plans of how, if at all, they might change elements of their work practices. Finally, participants used a weekly diary for six weeks to reflect on their thoughts and feelings about the research topic, and to outline any changes they had made, or attempted, in their clinical practice. The diary included prompts that facilitated thinking on personal, interpersonal and institutional aspects of weight in physiotherapy. The three aims of this intervention were integrated into these individual components of the intervention. A range of causes of weight stigma were integrated into the reading materials and the application of learning to clinical practice facilitated by the reflexive diaries (aim one). The clinical practice component was an active, sustained and repeated component (aim two). Individual learning within each participant's work context meant participants had the opportunity to integrate their individual circumstances including their different work environments, personal and professional backgrounds (aim three).

### One-to-one discussions

This final component of the process took place by phone on one or two occasions with participants at the end of the project (Table 2). In these sessions the facilitator and each participant discussed similar topics to those covered in the group sessions. Participants also had the opportunity to provide final feedback on the research process. One-to-one discussions had the benefit of confidentiality and individuality, and allowed participants who may not be as comfortable speaking within group environments another avenue for involvement. These conversations were semi-structured and provided a final platform where it was possible to incorporate elements of the aims of the intervention.

## REFLECTIONS ON AIMS – POINTS OF INTEREST

In keeping with action research processes (Kagan, Burton, and Siddiquee, 2008) we outline points of interest that came out of this intervention study. We discuss these points in the light of the theory discussed earlier in this paper and the subsequent aims of the project. Critical reflections were derived from the reflexive field notes kept by the facilitator, the diaries of the participants, and audio recordings of the group and one-to-one discussions. Feedback from the participants and discussions between the researchers further contributed to this process. Because of the design and small sample size it was not possible to measure changes in attitudes or clinical behaviour. However, we can discuss what participants said about the study. Most participants spoke of notable changes as a result of participating in this study including differences in their attitudes towards people of size and their ways of working with larger patients. For example, they discussed changes in interactions with patients. Lenny said: *“It certainly has allowed me to try and interact with my clientele on a different level”*. Another participant, Tracy, said: *“I feel it’s gone down really well because during the conversation [about weight] and afterwards as well, it’s been a really good two-way conversation. [Patients’] body language has been open and happy and the eye contact has been excellent so I feel that it’s been a positive thing that .... strengthened the therapist bond rather than scaring [patients] away.”* Participants also talked about gaining a deeper understanding of themselves. Helen said: *“I really think [participating in the study] has been beneficial. Exploring different parts of my conscious or subconscious that I wasn’t aware of”*. One participant said that, while she enjoyed interacting with the subject matter, little had changed in her practice. Perhaps this was because this participant self-identified as being overweight, so had lived understanding of this type of stigma. It would be valuable to explore in further research how (and if) this type of process might be made more relevant for those who have lived experience of weight stigma themselves.

The trial process met the *first aim* developed from the theoretical exploration of weight stigma in physiotherapy. This aim was to provide time and flexibility to explore many aspects of weight stigma derived from Goffman’s and post-structuralist thinking on the topic. This included the ‘big three causes’ focused on in previous weight stigma reduction research (controllability, empathy and social consensus), as well as other elements of embodied, social, political and historical contributors. These topics were introduced in a number of ways: through the papers, by the facilitator, or by the participants themselves. During the trial, the facilitator - and to some extent the participants - could tailor the depth of exploration, and points could be reintroduced or reiterated as

required. Whether this exploration was sufficiently comprehensive to change attitudes or practices could be the subject of future investigations.

The *second aim* was to create an intervention that involved active forms of learning that were repeated over time. Active learning was required in all aspects of the study design including: the reflexive diaries, interaction with the reading material, group discussions, one-to-one sessions and integration into the work environment through planning and doing. Although some input was given by the facilitator and provided in the reading material, the participants' experiences and contexts were integral to, and directive of the content in the intervention. There were many opportunities for repetition and re-iteration built into the study (see Table 2). Again, whether this active learning was dynamic or sustained enough to change practice or attitudes would be interesting to explore further in future studies.

Finally, in addressing the *third aim* of the project the design was congruent with the theory discussed earlier in the paper regarding the importance of situating stigma, including calls by the systematic reviews of Daníelsdóttir, O'Brien, and Ciao (2010) and Lee, Ata, and Brannick (2014) for more field based studies. A number of points of interest were specific to the context of physiotherapy and are outlined in the remainder of this section. The content and design of the study were directly relevant to physiotherapy and could be adapted to suit participants' individual work environments. The trial design was flexible enough that it could be, in many ways, *moulded by* the participants themselves. Participants were able to make their own choices about what to do with their new learning and take into account a number of factors that make each situation different.

While it is not possible to determine exactly what happened in clinical situations, participants were encouraged to adapt learning to their own personalities, their body, their gender, their work environment, and the variety of patients they might see. Xander described a change in an understanding of himself in his professional role and a greater understanding of the role of bodies in physiotherapy. He said:

*“The other thing that I have been more aware of is as a professional, we are desensitised to other people’s bodies. We see them all the time. Every half an hour I see somebody’s body. For me, I don’t mind if they are tall, short, big, small. I don’t think about it but obviously the patient themselves, if they have a poor body image - self-image, they may be more sensitive about it. So I need to kind of put myself into their shoes”*



There was an interesting interaction that occurred when physiotherapists started to reassess their status as an objective, neutral observer. Nathaniel said: *“Well, I thought of myself as being fairly neutral....But now, actually, I realise that that’s not enough. You know, having a neutral feeling that is not enough”*. Some participants described approaching patients differently including addressing weight in an indirect, gentle and tentative manner. This caused some conflict for physiotherapists as it contrasted with physiotherapy’s positivist, ‘body as a machine’ approach outlined earlier in this paper. For example, Xander discussed the discomfort he felt in an interaction where he used an indirect, cautious approach to refer a patient to a dietician: *“I perceived my interaction as awkward and clumsy rather than being as smooth as it could have been”*. In contrast, he said that the patient felt comfortable during the exchange: *“She didn’t feel awkward at all, she was fine, she was completely fine and happy. It was more me”*. This change in approach goes against physiotherapists’ traditional ‘neutral expert status’ approach to interactions with patients.

Congruent with critiques of physiotherapy for lacking reflexivity outlined earlier in this paper, the facilitator noted the participants’ unfamiliarity with theoretical, philosophical and psychological concepts. As a result it was important to allow opportunities to explain these concepts as they arose. There were many opportunities for reflection and reflexivity, both formally in the diaries, the one-to-one sessions and also, at times, in the group discussions. Despite the inclusion of this element, the participants seemed to find it particularly challenging to reflect about possible effects of their own body on interactions with patients, and how patients might perceive the profession and themselves as individual physiotherapists. The participants tended to view their own bodies as irrelevant in interactions with patients, and found it difficult to consider how their own body size and presentation (Butler, 1999) might affect weight related interactions with patients (Setchell, Watson, Jones, and Gard, 2015b). This was particularly the case when the physiotherapist was thin or muscular or did not self-identify as overweight at that time. This highlights the need for time and emphasis on reflexivity in rethinking weight in physiotherapy. Helen said: *“I just felt that thinking about it all and reflecting just took time, took a lot of thought, because it’s not things, honestly, that I have really spent time to reflect on before.”* Tracy discussed a new ability to reflect on a number of elements of her practice:

*“I’ve been a bit more aware of how patients might be looking at, like, me and at our reception staff and our advertising material and our website and thinking of what we project by what we look like and how we appear. So I’ve never really thought of it from that point of view. So that’s got me thinking about how we do things and how we present and thinking what people might be wondering about us”*.

This new level of reflexivity was evident on a number of occasions when participants talked about applying the learning they experienced in this trial to other types of stigma, not only that associated with fatness. This was evidence of integration of learning (Barber, 2012). Tracy, for example, talked about how she had a new comfort with other stigmatised conditions such as mental health. She gave the example of an interaction with a suicidal patient that she had not previously felt able to address: *“things that [were] in the too hard basket [previously]. [I thought] I might just stick to muscles and joints. Things that I might have just glossed over and moved onto something more in my comfort zone, [now] I’m more happy to address that then and there.”*

In summary, the trial was successful in addressing its aims and aligned with theory about weight stigma and physiotherapy. The trial included multifactorial elements of possible contributors to weight stigma and employed an active and prolonged approach. The intervention was specific to the physiotherapy context and provided participants with opportunities to reflexively address salient elements of their professional practice. Although the study design did not allow for direct assessment of attitude or behaviour change, participants spoke of changes that aligned with a rethinking of their way of working with weight in their professional roles.

### CONCLUSION

In this paper we explored how to approach reducing weight stigma in physiotherapy. We developed a relevant theoretical understanding of stigma by integrating elements of Goffman’s seminal work with post-structuralist perspectives based on the theories of Foucault. We highlighted how Goffman’s work helps gain an understanding of the embodied and social aspects of stigma that are likely to be involved in weight related interactions in physiotherapy. Furthermore, we demonstrated how a post-structuralist approach helps to uncover and address broader contextual cultural and political aspects of such interactions. Using this integrated understanding of stigma we highlighted weight stigma as a complex, socially embedded (and produced) phenomenon. We employed this theoretical understanding to (re)consider how to reduce weight stigma. We found that most weight stigma reduction interventions have been largely unsuccessful, and have often employed simplistic and short-term interventions. We argued that simple approaches to changing weight stigmatising attitudes are insufficient if we consider that by countering stigma we are trying to address

underlying complex and socially embedded issues. We designed and piloted a process that applied these theoretical concepts in the context of physiotherapy. The exploratory intervention involved integration of many contributors to weight stigma, active learning (via group and one-to-one sessions, reflexive diaries) and interactions with reading materials. Physiotherapy specific considerations included providing time to develop skills and knowledge about reflexivity, reconsidering the physiotherapist as a ‘neutral observer’ and an ‘expert’, and a greater awareness of the influence of bodies in this professional context. While taking this process into different contexts would require various adjustments, the intervention had flexibility and could feasibly be adapted for integration into undergraduate, postgraduate and professional development education. This paper provides new possibilities for reconceptualising the fat body and creates openings for (re)thinking weight interactions in physiotherapy and beyond. Furthermore, the process discussed in this paper might be adapted for (re)thinking beyond the topic of weight and could be considered for application in other aspects of healthcare.

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## **Chapter 8: Discussion**

My main aim in this thesis has been to broaden understandings of the physiotherapy–weight nexus, with a particular focus on an investigation of stigma. In this final chapter I highlight the empirical, theoretical and methodological contributions and significance of my research. Furthermore, I discuss some possibilities for future enquiry that emerged from this research, and consider reflexively the relevance of my own positioning in this work. I conclude with the practical and applied implications of my findings.

Before I commenced this research, enquiry into weight in physiotherapy was almost exclusively limited to biomedical domains, most notably weight management and the contribution of weight to health conditions. For example, in Chapter 3 I discussed that literature in the discipline often talks about obesity as a contributing factor to disorders that physiotherapists treat, or the effects of weight change on such conditions. I highlighted that prominent voices in the profession have increasingly encouraged physiotherapists to include weight management as part of “holistic” aspects of patient care. I also emphasised that there has been a notable rise in the integration of public health messaging into physiotherapy practice and environments, which promotes “healthy lifestyle” behaviours. I argued throughout this thesis that while these biomedical aspects of weight had received attention, there are many other elements of the physiotherapy–weight nexus that have not been investigated, presenting a serious gap in the literature.

I have identified important psychological, social, cultural and political elements of stigma that have not been studied in the physiotherapy and weight domain. These elements include the hegemonic social environment of physiotherapy, the emotional aspects of stigma (including disgust, judgement and contempt from those who stigmatise; and guilt, shame and resistance from those who are stigmatised) and the influence of the current dominant political and cultural contexts (including neoliberalism, increasing medicalisation and pervasive ideals of thinness). I argued that as these factors had largely evaded enquiry or consideration, their importance in this context was unrecognised. My central thesis was that the limited theoretical or formal investigation into this topic might obscure (unintended) consequences of weight-related interactions, such as perceptions of judgement, negative health outcomes or weight stigma. I argued that weight is a topic that deserves attention given a number of relevant factors, such as a contemporary climate of intensified weight stigma (Puhl & Kyle, 2014), the focus of physiotherapy on the body (Nicholls & Gibson, 2010) and the significant negative effects of weight stigma in healthcare (S. M. Phelan et al., 2015).

In this thesis I explored these under-theorised and potentially consequential considerations regarding weight in physiotherapy, with a particular focus on the physiotherapists’ role in the

interaction. As outlined in Chapter 1, I posed three overarching questions that drove my program of enquiry:

RQ1. Where, if at all, does weight stigma become a salient issue in physiotherapy?

RQ2. What, if anything, is endemic to the physiotherapy context that might institutionalise weight stigma?

RQ3. For the intersection between weight and physiotherapy, how might new possibilities be envisioned and implemented?

To discuss the combined findings from my theoretical and empirical research, I will consider each research question separately, highlighting how I have significantly contributed to a more nuanced and complex understanding of the physiotherapy–weight nexus than previously existed.

### **Towards a nuanced understanding of the physiotherapy–weight nexus**

*RQ1. Where, if at all, does weight stigma become a salient issue in physiotherapy?*

Taken together, the findings of my empirical and theoretical research highlight that there are many elements of physiotherapy where weight stigma can become a salient issue. In particular, my thematic analysis of patient narratives (presented in Chapter 5) provides a rich understanding of a number of these elements. Before patients had even entered a physiotherapy environment, they talked about a psychological and social salience of weight to an (imagined) interaction with physiotherapists, fearing judgement and stigmatisation for being overweight. Further, patients spoke of a heightened sense of vulnerability in elements of physiotherapy interactions, including when partially undressed, being touched, being observed (for example, during gait analysis or while exercising) and when there was a lack of privacy in the design of the clinic. Participants also spoke about feeling judged, excluded or stigmatised in response to elements within the clinic environment. For example, participants talked about images privileging thin bodies, the prominence of exercise equipment, equipment/furniture that was too small for their bodies, and the sporty and thin presentation of physiotherapists and other staff. Negative judgement was also perceived in the educative style and the content (particularly when focussed on weight as the cause of their presenting condition) of physiotherapists' communication.

Physiotherapists' responses to the attitudes tests presented in my previous work (Appendix A) also underlined that they were likely to judge or stigmatise people for being overweight. This judgement included using an educative style when talking about weight, a focus on weight as the cause of presenting conditions and an emphasis on individual causes of weight (diet and exercise).

Building on this earlier work, I argue that the study presented in Chapter 5 highlights that physiotherapists attended to biomedical aspects of weight, yet often neglected to consider the psychological and social elements of these interactions. This emphasis on the biomedical aspects of

weight aligns with the body-as-machine logic, based on a positivist perspective, that I have joined other authors in arguing is the current dominant paradigm in physiotherapy (M. Jones et al., 2002; Jorgensen, 2000; Nicholls & Cheek, 2006; Nicholls & Gibson, 2010; O'Sullivan, 2012). Together, the findings demonstrate that the physiotherapy–weight nexus can often be psychologically and socially salient, and often involves embodied and interactional elements of stigma that were described by Goffman (1963). Furthermore, these findings suggest that physiotherapists may not be aware of these factors.

*RQ2. What, if anything, is endemic to the physiotherapy context that might institutionalise weight stigma?*

The discourse analysis of physiotherapists' discussions (presented in Chapter 6) highlights the institutionalisation of certain ways of thinking within physiotherapy, which in turn produces particular ways of working in physiotherapy. For example, I posit that the physiotherapists constructed fatness as “risk” when talking about weight as individually controllable and an important contributor to physiotherapy conditions. As Hannem (2012) argued (see Chapter 2), the institutionalisation of risk legitimises judgement and disciplining of fat bodies, which in turn (re)produces stigma. Furthermore, when physiotherapists discuss patients who they consider overweight, they construct a “normal” patient to whom the fat patient is compared negatively. The latter is seen as “abnormal” or, in their words, judged to be a “difficult patient”. I argue that, in alignment with Foucauldian theories about power, who creates a dominant notion of truth is very important as this institutionalises a kind of disciplinary power that can, without force, make people conform to this “truth” (Vaz & Bruno, 2003). In keeping with literature on weight stigma elsewhere in healthcare (S. M. Phelan et al., 2015), my research findings suggest that this production of a truth of what is “normal/not risky” and “difficult/risky” gives physiotherapists apparent reason and legitimacy to “manage” or “discipline” and judge the fat patient. Furthermore, in this context I argue that the patient's own truth of what is risky or normal can be institutionally silenced. Other authors, such as Tischner and Malson (2012), have found similar silencing of people who are overweight in health contexts.

Professional reflexivity is considered vital on both individual and profession-wide levels so that issues such as stigma can be identified and addressed (Delany & Watkin, 2009). As I discussed in Chapter 2, a number of authors have argued that physiotherapy lacks this ability to reflect on itself at both an individual therapist and profession-wide level (Clouder, 2000; Donaghy & Morss, 2007). Consistent with this, my research in Chapters 6 and 7 showed that physiotherapists had difficulty reflecting on the potential influence of their own characteristics in interactions with patients. Furthermore, participants' lack of knowledge of philosophical, psychological and critical

concepts, (including elements of interpersonal interactions, understanding the emotional aspects of stigma, and lack of analysis or acknowledgement of current political and cultural context of fatness and bodies) was indicative of a profession-wide lack of emphasis on reflexive education and learning.

These research findings also have political salience. Other authors have argued that in many ways it is by neglecting to attend to psychological, social and cultural issues, and instead preferencing biomedical thinking, that the profession has secured the prominent position it enjoys in healthcare today (Eisenberg, 2012; Nicholls, 2008; Nicholls & Cheek, 2006). These authors posit that physiotherapy (at least in part) receives support, such as funding, legitimacy and inclusion from powerful macro-sociopolitical structures, by choosing to focus on this essentialist form of rationality. A similar argument has been used when considering the reasons for the current dominance of medicine (Lupton, 2012b). As such, challenging hegemonic biomedical thinking by attending to other factors such as stigma and other social and political concerns may arguably destabilise physiotherapy's position in health and threaten the power the profession has gained in establishing therapists as a particular type of "expert".

*RQ3. For the intersection between weight and physiotherapy, how might new possibilities be envisioned and implemented?*

In the discussion sections of the studies I presented in Chapters 5 and 6 (and in my earlier study), I highlight a number of ways physiotherapists can broaden their thinking and practice so that they can attempt to reduce the possible negative outcomes of weight stigma. For example, in my earlier work (Appendix A) I suggested that physiotherapists could reflect on their own attitudes towards patients who are overweight, that stereotyping and judgement should be avoided, and that collaborative communication should be fostered. In Chapter 5 I propose that it could be helpful to: consider changes to the physical environment (such as using a range of body sizes in promotion images, increasing privacy in clinic layout, minimising the use of mirrors), develop an increased awareness of the exposure and judgement some patients experience, and consider how much the topic of weight is discussed.

Further, in Chapter 6 I suggest that it might be important for physiotherapists to reframe discourses portraying people who are overweight as "difficult", and that education should encompass complex understandings of weight and associated stigma. However, in my final study I argue that a simple passive input such as reading these suggestions in a journal paper (or this thesis), or hearing a presentation on the topic at a conference is unlikely to change these attitudes. Rather, I argue that it is important to acknowledge that addressing such attitudes and clinical behaviours will not be easy until there is a change in pervasive institutionalised ways of thinking

about weight in physiotherapy (and perhaps in society as a whole). Based on this understanding, in my final study I argue that change is likely to be possible if physiotherapists: are provided with an environment where they can attend to weight stigma contextually, develop skills in reflexivity, consider their subjectivity, and understand the sociopolitical aspects of weight and its associated stigma. This aligns with, and develops, literature about reducing other forms of stigma and discrimination, which also advocates for embedded and complex interventions (e.g., Heijnders & Van Der Meij, 2006; Paluck & Green, 2009). At the end of this chapter, I discuss applied implications of these approaches to changing stigma in physiotherapy (and other health professions) and how they present challenges to current pedagogy. I also highlight suggestions for further research.

### **Theoretical contributions beyond the physiotherapy–weight nexus**

This thesis has been a combined theoretical and empirical exploration of the research topic, which together contribute to theory. Although the theoretical and the empirical work were largely presented separately, in some ways this is a false dichotomy as they developed iteratively as a cumulative result of both endeavours. My research findings extend beyond the physiotherapy–weight nexus and highlight a number of factors that researchers have, to date, given little attention.

#### **Relevance to other health professions.**

While I have focussed on one profession in this research, my findings are likely to be relevant to other health professions. As I discussed earlier (see Chapters 2 and 3) there has been considerable research on discerning the weight-stigmatising attitudes of a number of similar health professionals (S. M. Phelan et al., 2015). However, there is little literature regarding patient experiences, the production of weight stigma through discourses or how to reduce weight stigma. Professions that, like physiotherapy, adhere to biomedical frameworks are likely to find similar constrained ways of conceptualising weight to those found in this study. For example, researchers have criticised medicine (Lupton, 2012b) and dietetics (Grace & Trede, 2013) for an over-reliance on biomedical perspectives. These health professions may also benefit from broadening their conceptualisation of weight to include more than a biomedical approach.

Further, health professions that interact intimately with the body will find relevance in my findings. For example, while often working from perspectives outside the biomedical framework, nursing similarly involves close interactions with bodies (at times even more intimate than physiotherapy as it involves the “leaky body”) and as a result is likely to encounter similar issues with this bodily proximity to those found in my research (Huntington & Gilmour, 2001). Medicine too involves intimate contact with the body (Lupton, 2012b). As mentioned in Chapter 2, research has already demonstrated problems in medicine associated with body intimacy and weight stigma,

including patients avoiding appointments where they fear these elements will be involved (Russell & Carryer, 2013). As a result, my findings about the interactional aspects of weight stigma are likely to be relevant to these professions.

Additionally, health professionals that, like physiotherapists, have a “sporty” image or association may encounter patient expectations of judgement and perceptions of stigma that warrant attention. For example, exercise scientists, who also demonstrate weight stigma (Chambliss et al., 2004), may benefit from my research findings that suggest a reconsideration of the layout of clinics and the impact of promotional images that privilege thin, “sporty” bodies. My findings can also provide a useful starting point for similar investigations in these areas in other health professions and health professional education. (I discuss education further later in this chapter.)

### **Reconceptualising weight stigma.**

I have added to the work of other authors (Farrugia, 2009; Hacking, 2011; Hannem, 2012) who have argued for the value of reconceptualising stigma by combining the embodied and social work of Goffman (1963) with post-structuralist theoretical insights. In the field of weight stigma research, many authors have derived enquiry into the topic from Goffman’s theories on stigma (for example: Himmelstein & Tomiyama, 2015; Puhl & Brownell, 2003a, 2003b; Rasmussen, 2015; Weiner, Perry, & Magnusson, 1988). Further, a number of authors have conducted post-structuralist enquiry into fatness (notably: Gard, 2010; Guthman, 2013; Lupton, 2012a; S. Murray, 2007; Rice, 2007). However, my research is the first to apply the combination of the two approaches to the topic of weight. I used the combined theory to argue for an understanding of the complexity of weight stigma including embodied and interactional elements, and broader contemporary social, cultural and political factors. Using this theoretical lens I contend that weight stigma is an embedded and consequential form of stigma.

Previously the focus has been on three main areas of research: 1) interpersonal communication (e.g., Gudzone et al., 2014; Gudzone, Huizinga, Beach, & Cooper, 2012; Gudzone, Huizinga, & Cooper, 2011; Mulherin et al., 2013; Stone & Werner, 2012; Swift, Choi, Puhl, & Glazebrook, 2013; Wear, Aultman, Varley, & Zarconi, 2006), 2) treatment outcomes (see review: S. M. Phelan et al., 2015) or 3) macro-social and political elements (e.g., T. Brown, 2014; C. Cooper, 1997; Gard & Wright, 2005; Howell & Ingham, 2001; Lupton, 2004; Rich & Evans, 2005). I have demonstrated intricacies of weight stigma that have arguably lacked consideration in the past. For example, I show that weight-based stigma and judgement can be seen in many aspects of health environments that may be as mundane-seeming as furniture, equipment, branding, the people in the environment or the design of the clinic. From the combined approach I used, the broad understanding of weight stigma will be particularly useful for researchers seeking to understand why such stigma occurs, and consequently how it might be reduced.

### **Theorising physiotherapy.**

I have also contributed to theorising physiotherapy. Enquiring into weight stigma in physiotherapy necessarily involved considerable unpacking of the profession itself. In particular, I have expanded on theory about the salience of bodies in physiotherapy beyond traditional biomedical concerns, highlighting that broadening the focus of physiotherapy to embodied and psycho-sociopolitical factors is important if we are to consider how to address factors such as stigma. My findings contribute to concerns expressed by other authors that the profession is under-theorised and lacks criticality (Gibson et al., 2010; Nicholls & Gibson, 2012; Trede, 2006, 2012). Using weight stigma as a stimulus to react interactively with the profession, my research significantly contributes to, and extends, work that is beginning to consider how to address this problem.

Benefits of professional reflexivity are numerous. They include reconsidering some of the basic assumptions and established practices within physiotherapy to determine their relevance or value in today's health context. For example, the profession's adherence to practices, such as evidence-based practice (Crosbie, 2013), derived primarily from the medical discipline (Nicholls & Cheek, 2006) might be reconsidered or adapted. Many argue for the benefits of such a paradigm shift, including the flexibility to adapt to changing sociopolitical or economic circumstances that occur in healthcare (e.g., Clouder, 2000; Owen, 2014; Patton, Higgs, & Smith, 2013) and that such a shift is important to provide good and ethical patient care (e.g., Praestegaard et al., 2015; Trede, 2006, 2012). However, as mentioned, expanding or changing the theoretical underpinnings of physiotherapy also has the potential to disrupt the power the profession has gained and is likely to meet resistance from some, perhaps particularly from those in positions of power (McPherson et al., 2015).

### **Contribution to critical psychology.**

I have also contributed to psychology theory, in particular that of critical health and social psychology. I join critical psychologists in demonstrating that post-structural approaches can broaden understandings beyond the social and individual domains of more mainstream psychological enquiry (Gough & McFadden, 2013; M. Murray, 2015; Potter, 2011; Tuffin, 2004). Further, while critical psychologists have examined other health disciplines, for example, public health (e.g., Peel, Parry, Douglas, & Lawton, 2005; Wigginton & Lee, 2013), dietetics (e.g., Madden & Chamberlain, 2010) and pharmacy (e.g., Dew, Norris, Gabe, Chamberlain, & Hodgetts, 2015), they had not yet researched physiotherapy. My contribution of an investigation of physiotherapy is significant as the profession constitutes a large and influential part of healthcare and, as argued throughout my thesis, has largely lacked consideration in critical or psychological research.

Furthermore, the interdisciplinary nature of this work is beneficial. Specifically, a critical psychology perspective has added considerably to the understanding of physiotherapy. However, the reverse is also true. As both physiotherapy and fatness are inherently related to the body, I have drawn attention to this element of human experience and in doing so, I add to calls for a consideration of the body in critical psychology (e.g., Ussher, 2008). Furthermore, the combined theoretical approach I used to understand stigma can be applied by critical psychologists to help understand other forms of stigma and might assist with research of other health professionals.

My work has considered physiotherapy through a lens of weight stigma. However, my findings highlight that there are many more elements of physiotherapy worthy of consideration from a critical psychology perspective, including investigation of other types of stigma or discriminatory behaviours, a more direct consideration of power, and analysis of current dominant pedagogical practices.

### **Methodological contributions**

I have used a variety of research methods to explore my topic. The interdisciplinary and critical nature of my approach is highlighted in that some of the selected research methods were common in some fields but not in others. For example, as I argued in Chapter 4, the use of quantitative comparative and descriptive analysis is common in physiotherapy and psychology. However, my studies were entirely qualitative. While common in disciplines such as sociology, qualitative methods remain fairly uncommon in mainstream psychology (Gough & McFadden, 2013), and rare in physiotherapy research (Gibson & Martin, 2003; Greenfield et al., 2014; McPherson & Kayes, 2012). I used a variety of research designs and data collection strategies in my thesis. This was not an *a priori* decision but was the result of searching for appropriate ways to investigate the topic (Chamberlain, 2014) that were intentionally broad in an attempt to gain a breadth of understanding of an under-researched area and in order to be consistent with my theoretical approach. Others have reasoned that using a variety of methodological approaches provides greater insight into a topic (Ussher, 1999).

I commissioned some innovative strategies to tailor my empirical research to suit my research topic and the particular population. For example, the situated nature of my enquiry is somewhat unusual outside of ethnographic research, and responds to calls for field-based studies in weight stigma research (Dánielsdóttir et al., 2010). This response is important because it is argued that the context in which research occurs has an effect on the findings (Carpiano, 2009). For this reason, I situated all of my studies directly in physiotherapy environments. For example, it is likely that in the study presented in Chapter 5 conducting the first interviews triggered memories and thoughts about physiotherapy that participants might not have accessed had we conducted



interviews elsewhere. Similarly, situating the focus groups presented in Chapter 6 in physiotherapy environments is likely to have evoked thoughts of participants' environment and institutional role as physiotherapists rather than themselves as individuals. The intervention study presented in Chapter 7 was also situated within a physiotherapy clinic for the group sessions; this is likely to have had similar benefits to those I explained in relation to the study in Chapter 5. Furthermore, in this study, participants carried out part of the intervention in their own work environments. As a result, they could directly trial learning from the research in an applied setting. I venture that situating my empirical work in this way added to the richness and relevance of my data and results.

Another research strategy that I employed that is relatively uncommon in physiotherapy was repeat interviews (see Chapters 4 and 5). Authors such as Flowers (2008) and Chamberlain (2015) have argued that the value of speaking with a participant more than once rests in the fact that it allows time for rapport to be built in the interviews and for participants to consider the initial questions and their own answers. These authors argue that these factors often produce more detailed and reflective data. Rapport may be important but difficult to establish when talking about stigmatised conditions because participants might take time to feel comfortable speaking about their experiences. As a result, I suggest repeat interviews (and other strategies that encourage the development of rapport) are particularly beneficial when researching stigma as an outsider researcher (Wigginton & Setchell, 2016). From my own experience with the process, I also found the repeat interviews a useful opportunity to ask for feedback from participants on my summaries of the first interview (which sometimes produced interesting and unexpected responses from participants) and to follow up on any interesting questions that came out of reviewing the first interview. I separated the two interviews by two weeks and provided a diary to help facilitate participant reflection. I intentionally did not use the diaries as data as I wanted them to be an opportunity for voluntary private reflection by participants about the topics discussed in the first interview. In the second interview I asked the participants if they had anything written in the diary they wanted to discuss. Some participants chose to read the diary to me, while others chose not use the diary at all, or did not use it in the second interview. The main aim of the repeat interviews and the diaries was to try to maximise the opportunity to hear the participants' perspective (and possible changes to their original discourses) while balancing demands on their time.

In the intervention study presented in Chapter 7, I created the most innovative research methodology of this thesis. The study was theory driven, yet I also designed it to be participatory so it had the flexibility to be inductive. The research design was similar to action research methodology in that it involved action (intervention), participation from stakeholders, and research (Greenwood & Levin, 2007; Kagan et al., 2008). I designed the study using an array of intervention methods and data collection techniques, which is often a feature of action research (Greenwood &

Levin, 2007; Kagan et al., 2008). Most research using an action research framework works with populations that are deemed “disadvantaged” or “vulnerable”, where a part of the research is to empower such communities. My research deviated from this tradition; instead I chose to work with those who could be considered in the position of power or authority in this situation. This shift of focus is in line with moves in a number of disciplines to consider the importance of locating deconstructions of privilege and power with those who have them (Fitzgerald, 2003; A. Johnson, 2006; Urban, 2007). Taking this approach has the benefit of putting some of the responsibility for addressing marginalising issues such as stigma in the hands of those who may have benefited from not being ill-treated (Wigginton & Setchell, 2016).

All the study designs I have used in this thesis are rare in physiotherapy research, common in critical psychology, but less common in mainstream psychology. Thus the interdisciplinary nature of this work has brought new research techniques to physiotherapy, and I have joined critical voices in challenging traditional techniques used in psychology (Gough & McFadden, 2013; M. Murray, 2015; Tuffin, 2004) and “off the shelf methodologies” (Chamberlain, 2011, 2012). As a result, this thesis shows that constructing research approaches that are outside of disciplinary traditions can help to open up new areas of enquiry, can inform practice and can bring new perspectives on topics of interest.

### **Personal reflexivity**

As discussed in Chapter 1, acknowledgement of the researcher’s subjectivity and positioning using a process of personal reflexivity is usually considered important in constructionist epistemologies, and is a part of demonstrating rigour and quality in reporting qualitative research (Willig, 2001). Personal reflexivity involves a conscious and contextualised understanding of the interaction between the researcher and the research (Braun & Clarke, 2013). In relation to this thesis topic I believe two particular aspects of my positioning are important to discuss.

First is my experience with stigma. As already noted, I am thin. I have in fact always been thin, so have no experience of living in a fat body, nor being stigmatised for this. I reflected on the potential influence of this position on the studies in Chapters 5 to 7. However, it is important to also consider the potential of this outsider positioning to affect the thesis as a whole. Lack of personal experience with weight stigma may mean that I have at times missed elements of the experience that are not evident to me or inadvertently reproduced stigma (Hayfield & Huxley, 2014). Furthermore, as white, middle class and able-bodied I am sure I will also fail to see elements of other stigmas that intersect with weight stigma. I have tried to mitigate my lack of insider knowledge by including the perspectives of people who have lived experience of weight stigma in the research design, participation and in my literature review (Wigginton & Setchell, 2016). In Study 1, for example, I sought the perspectives of people who self defined as overweight, I used

‘expert insiders’ to provide insight into data interpretation and I included literature from critical obesity studies. Further, as a queer non-gender-normative woman I have lived experience of stigma. Sometimes this may have influenced my emotional responses to participants’ experiences (for example, at times I felt anger or shame), when this happened I tried to return to the participants experiences, acknowledging that my experience of stigma is individual and has intrinsically different characteristics to weight stigma. However, at times I drew on my personal experiences of stigma to help notice, and understand, the weight stigma in the data: as Goffman (1963) argued, some experiences of stigma are similar regardless of the stigmatised characteristic.

Second, being a physiotherapist has had a large effect on my research. My 20 years of clinical practice means that I have a comprehensive experiential understanding of the profession, at least in the Australian context. I have also worked for short periods in the United Kingdom and as a volunteer in Papua New Guinea and East Timor. I have worked in urban, rural and remote contexts, in public and private hospitals, in private practices, in a prison, in mines, in a TV station, in an international bank and in a circus. While my expertise is primarily in the musculoskeletal sub-discipline, I also have experience in neurology, orthopaedics, cardiovascular, women’s health and aged care. I have worked closely with more than 50 physiotherapists over my clinical career. This lived experience helps me understand and research elements of the profession that may not be immediately apparent to those who have little or no experience of the context. I felt that continuing to work in a clinical setting during this research helped me to maintain an applied relevance. However, being a physiotherapist may also mean that I fail to identify some elements of the physiotherapy–weight nexus because I am too close (Ritchie, Zwi, Blignault, Bunde-Birouste, & Silove, 2009) or I might have an insider bias towards the profession (Giles, Reid, & Harwood, 2010). This (subconscious) bias may mean that I have underrepresented negative aspects of the profession or minimised findings of stigma. I attempted to mitigate this influence in a number of ways. For example, I engaged extensively with literature critical of healthcare and physiotherapy practice, and was careful not to provide my own views during data collection and analysis. My insider experience also means that I know how to speak in a “language” that physiotherapists will understand. This may be one of the reasons why my work has received considerable attention in the discipline (e.g., American Physical Therapy Association, 2014; Eaton, 2015; Harrison, 2014; Tarquinio, 2014).

### **Implications of findings**

I will first discuss the implications of my findings to clinical research. I focus on what individual clinicians (or those responsible for their development such as managers and clinical educators) might find beneficial to address. While it is important to keep in mind (as mentioned) that widespread change is unlikely without a paradigm shift in understanding in the profession, there are

important clinical applications of my research, including some that can be instituted immediately by clinicians. These changes, while largely relying on uptake by individuals, are nevertheless likely to have a positive effect on patients who are considered overweight. Following this discussion, I review the implications of my research to education. It is here that I argue that wide-reaching change involving a broader (re)consideration of physiotherapy theory and pedagogy are necessary to address the issues my research findings highlight.

### **Implications for clinical practice.**

My findings encourage clinicians to reconsider the way they think and practice, as a participant in the study in Chapter 7 said, by “thinking about how we do things, and how we present, and thinking what people might be wondering about us”. This reconsideration includes a reflection about oneself as not just an “objective observer” but as a subjective person, with potential to have attitudes, judgements, feelings and opinions such as weight stigma. To this end, clinicians can ask themselves questions such as: What are my emotional reactions to people who are overweight? Or more broadly: Who do I judge and why? This prompts physiotherapists (and others) to consider the implications these ways of thinking might have on the way they practice. Taking this reflection a little further (as the participant in the quote above has done), it is also important to reflect on how clinicians might be seen by others. Might they be perceived as stigmatising even if they don’t think they are, and how might this affect their interactions with patients?

The following suggestions may address some issues that the above considerations highlight. While my findings, particularly in Chapters 5 and 6, emphasise that each context is different and there is no one “right” way of working, they also suggest that it is likely that a greater awareness, understanding and preparedness to implement a number of factors would be helpful for health professionals working with people of size. Fostering an awareness of the interactional aspects of stigma can be beneficial, which can be done through techniques such as avoiding communicating stereotyped assumptions about the reasons people are overweight (e.g., thinking beyond just diet and exercise) and the behaviours bigger people might have (e.g., don’t assume laziness or a lack of “compliance”). Furthermore, where clinical interactions involve stigmatised characteristics, it is likely to be particularly important to attend to the power interactions involved. For example, as highlighted by my findings from patient interviews in Chapter 6, it could be helpful to use collaborative or patient-centred communication styles in order to avoid perceptions of judgement or making assumptions. Again, as discussed of my findings from patient interviews, health professionals should also consider their environment. In physiotherapy, an example is that it may be useful to consider weight stigma in the positioning and prominence of mirrors and exercise equipment. Further, physiotherapists (and related professionals) should consider and revise the use of furniture, equipment and images that preference thin bodies.

### **Implications for education.**

Beyond the individualistic clinical implications suggested above, my research sets a large challenge, not only to physiotherapy, but also to other related disciplines. Specifically, my findings suggest that it could be beneficial for physiotherapy (and similar health professions) education to include complex understandings of weight and its associated stigma. I would argue that this should involve education about understandings of the current sociopolitical context surrounding fatness and weight loss in healthcare; the complexity of the determinants of weight; the role of the body in healthcare; the effect of professional promotional “branding” materials, communication styles and environment on weight stigma; and should highlight patient perspectives about weight. However, this would only address the issue of weight stigma. What of other stigmas? What if weight stigma changes? Taking a more comprehensive approach, my findings highlight the possibility that physiotherapy education in general and underlying theoretical perspectives are currently insufficient. My research indicates that health professions that are predominantly biomedical in focus, such as physiotherapy, would benefit from a paradigm shift to incorporate philosophical, psychological and critical concepts into their core knowledges. I hope that by incorporating these perspectives professions may gain a greater reflexive understanding and be better prepared to detect and address issues such as stigma.

As mentioned in Chapter 3, there are small signs of a shift towards this approach with selected adoption of a bio-psychosocial approach in some areas of physiotherapy. However, my findings highlight that even a bio-psychosocial approach is insufficient to address important factors relevant to stigma, as it does not take into account cultural, historical and political elements. Recent physiotherapy research has seen similar calls for a reconsideration of education and theory. For example, both Patton et al. (2013) and Rowe (2015) argued that it is important to critically examine physiotherapy pedagogy to enhance clinical learning, and Nicholls and Gibson (2012) discussed the importance of philosophy in physiotherapy. Further, Grace and Trede (2013) examined understandings of professionalism in physiotherapy and also suggested a need to rethink pedagogical approaches and incorporate philosophical knowledge. My findings and exploration of weight stigma in the profession add to this growing body of research by highlighting some negative implications of not making such a shift and could be useful to help advocate for moves towards a broader conceptualisation of health. I do not imagine that creating such a shift is simple, nor can I provide a definite solution regarding how to create it. However, by recognising that there is a need for change and proposing some ideas about how physiotherapy (and other professions) might be rethought, I hope to contribute to a step in this direction.

## **Further research**

As discussed, I chose to make my research broad to get an overview of a little researched topic. Since my research topic is new to physiotherapy, almost any element that I have explored would benefit from further research. For example, specific factors that I identified in clinical encounters, such as communication about weight, could benefit from a more in-depth exploration, including an investigation of particular phrases, mannerisms or words pertaining to weight that are best avoided or encouraged as helpful forms of communication. It would be particularly beneficial to observe real clinical interactions to gain greater insight into what occurs. Another example would be to consider in more detail how physiotherapy branding relates to stigma and what other options are possible, such as how to include a range of body sizes in the images and language used to promote the profession.

My empirical contributions to this topic were primarily urban Australian and, although my review of literature was international, due to availability (and the sociopolitical circumstances that underlie this availability) most was Western focussed. While some literature suggested that weight stigma has similarities across cultural contexts (e.g., Brewis et al., 2011), it has been little explored in health contexts outside of the West. As a result, it would be valuable to explore this research topic in different cultural clinical settings to contribute to a more global understanding of how weight stigma plays out in health. Furthermore, while my research did involve some people who experienced other types of stigma (e.g., sexism, racism, transphobia) and as a result the way these intersected with weight stigma was included within my findings, more specific research that focussed on these intersections would be useful to highlight particular issues in each context. It would also be valuable to apply the same or similar research to other health professionals because much of what I have found in relation to physiotherapy is likely to be relevant and, beyond identification of weight stigma, has been little investigated.

As the focus of this thesis was largely applied, it would be valuable to examine in greater detail the conceptual applications of my findings. In particular, it would be worthwhile to explore in more depth what my work says about physiotherapy, health and indeed the modernist project more broadly. Further, my work might be helpful to educate physiotherapists (and similar health professionals) to consider a need for change. It would be interesting to investigate international health curricula that currently include teaching of philosophy, reflexivity or critical theory and consider effectiveness and viability for inclusion more broadly. Specific to weight stigma, I suggest it would be helpful to design and trial some resources that directly discuss the physiotherapy–weight nexus by developing the method designed in Chapter 7. A teaching protocol based on this could be developed, conserving the core concepts that findings of the intervention study in Chapter 7 highlighted. That is, interventions to change weight stigma need to be complex,

sustained, involve active learning, and be applied and contextually specific. I recommend developing resources with flexible and interactive media that incorporate complex and embedded learning models and fit with contemporary pedagogy (Patton et al., 2013). Further research designed to integrate learning from a range of cultural contexts would be important to develop broad relevance and consider a variety of ways of educating.

## **Conclusion**

I have explored how physiotherapy and people's body weight interact, and researched elements of this nexus that have not previously been considered. I have particularly attended to the possibility of weight stigma as a consequence of physiotherapy's historically constrained intersection with weight. I have argued that it is important to take weight stigma seriously as an embedded and ingrained form of stigma. I have highlighted the ways in which this might be approached by examining stigma as an embodied and social concept where power is involved as well as political contexts. Building on this understanding of weight stigma, I have considered what might make it possible in this profession. I have argued that the current education system of physiotherapists (and perhaps other health professionals) may be insufficient because it lacks social scientific underpinnings such as philosophy, sociology, psychology and critical theory. The professional adherence to a narrow biomedical focus has helped the profession gain its current position in society but has produced certain regimes of truth about weight that can be judgemental, stigmatising and have negative consequences for patients. By exploring these factors I have opened the possibility of seeing how things might be otherwise.

I propose that weight-related healthcare interactions can be consequential. The findings of this work will, I hope, most directly affect patients of physiotherapists, particularly those who are seen as overweight, by contributing to efforts to reduce the harmful effects of weight stigma in healthcare (S. M. Phelan et al., 2015). I argue that developing a nuanced understanding of interactional, psychological, social, cultural and political aspects of stigma can provide a more flexible, patient-centred and ethical way to work with people who are seen as overweight. My findings also contribute to work that addresses broader concerns about practitioner-centred communication, a hegemonic biomedical focus and the "expert" status of physiotherapists (and other health professionals). My research encourages physiotherapists (and others) to recognise interactions that might involve stigma, and to be aware of where power and privilege may play out in healthcare situations. Based on my research findings, I encourage individual health professionals to be flexible, to listen to the perspectives of patients who have experienced stigma and to be more conscious and complex in their choices of communication and environment. More broadly, this work matters politically. It is a challenge to an over-reliance on reductionist thinking, including powerful systems that preference individual blame for health conditions. As such, my work

advocates for a paradigm shift to a physiotherapy that incorporates broader considerations of the sociopolitical environments that create the possibilities for ill-health and health inequities.



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## Appendix A1 – Preliminary study: Physiotherapists and weight stigma

The Appendix is in the form of a manuscript that is published by the *Journal of Physiotherapy*:

Setchell, J., Watson, B., Jones, L., Gard, M., & Briffa, K. (2014) Physiotherapists demonstrate weight stigma: A cross-sectional survey of Australian physiotherapists. *Journal of Physiotherapy*. 60(3), 157-162

**Title:** Physiotherapists demonstrate weight stigma: A cross-sectional survey of Australian physiotherapists.

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**Abbreviated title:** Weight stigma in physiotherapy

**Key words:** Body mass index, body weight, ethics, obesity, physical therapists, physical therapy modalities, social stigma, stereotyping

**Ethics approval:** The University of Queensland (UQ) and Curtin University (Curtin) Ethics Committees approved this study. All participants gave informed consent before data collection began.

**Source(s) of support:** none

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**Competing interests:** none

## ABSTRACT

**Question:** Do physiotherapists demonstrate explicit and implicit weight stigma?

**Design:** Cross-sectional survey with partial blinding of participants. Participants responded to the Anti-Fat Attitudes questionnaire (AFA), and physiotherapy case studies with body mass index (BMI) manipulated (normal or overweight/obese). The AFA included 13 items scored on a 0-8 Likert type scale. Any score greater than zero indicated explicit weight stigma. Implicit weight stigma was determined by comparing responses to case studies with patients in different BMI categories (where responses were quantitative) and by thematic and count analysis for free text responses.

**Participants:** Australian physiotherapists (n=265) recruited via industry networks.

**Results:** The mean item scores for the AFA (3.2, SD 1.1) indicated explicit weight stigma. The dislike (2.1, SD 1.2) subscale had lower mean item scores than the fear (3.9, SD 1.8) and willpower (4.9, SD 1.5) subscales. There was minimal indication from the case studies that patients who are overweight will receive different treatment from physiotherapists in clinical parameters such as length of treatment time ( $p=0.73$ ) or amount of hands on treatment ( $p=0.88$ ). However, there were indications of implicit weight stigma in the way participants discussed weight in free text responses about patient management.

**Conclusion:** Physiotherapists demonstrate weight stigma. This finding is likely to affect the way they communicate with patients about their weight, which may negatively impact their patients. It is recommended that physiotherapists reflect on their own attitudes towards people who are overweight and whether weight stigma influences treatment focus.

**Trial registration:** NA – not a clinical trial.

## INTRODUCTION

Weight stigma has been defined as negative attitudes towards people who are overweight or obese, and frequently involves stereotyping people as lazy, sloppy, less intelligent and unattractive (Puhl & Heuer, 2009). Weight stigma has considerable negative health effects (Puhl & Heuer, 2010) and is common in health care (Puhl & Heuer, 2009). Eighty one percent of physiotherapists believe that weight management is part of their scope of practice (Carter et al., 2013), and 85% report that they currently use weight management strategies with their patients (Carter et al., 2013). Considering the prevalence of weight stigma in health care, and the focus by physiotherapists on weight management, physiotherapists require an understanding of their own attitudes towards people who are overweight and, if they are negative, to ensure that they do not harm their patients with these attitudes. Therefore, the aim of this study was to identify whether physiotherapists demonstrate weight stigma and the potential effects of this on patient treatment. For the purposes of this article behaviour that is stigmatising or biased is termed ‘discriminatory behaviour’ or ‘discrimination’.

The causes, and health outcomes, of being overweight or obese are complex and less well understood than commonly thought. Gard and Wright (2005) demonstrate the limitations of a simplistic energy in versus energy out (diet and exercise) approach to weight management. Cochrane reviews also show that exercise (Shaw, 2006) and diet (Norris, 2005) have, at best, only small effects on weight. Multiple factors other than diet and exercise may determine adiposity (Eisenmann, 2006; McAllister et al., 2009). Body weight’s relationship to health is also not as clear as often thought, as shown in a large systematic review (n=2.88mill) demonstrating that people of ‘normal’ weight (by body mass index (BMI)) have the same mortality rate as people who are ‘moderately obese’ and a higher mortality rate than people classified as ‘overweight’ (Flegal, Kit, Orpana, & Graubard, 2013). The commonly held beliefs that weight is primarily under individual control through diet and exercise, and that high BMI necessarily means ill-health, are considered by some authors to be a consequence of weight stigma and perhaps a factor that perpetuates it (Lupton, 2012).

Weight stigma is prevalent, with levels similar to those of racism and sexism (Puhl, Andreyeva, & Brownell, 2008). Moreover, it is increasingly prevalent, with levels of perceived discrimination having almost doubled in the past decade or so (Andreyeva, Puhl, & Brownell, 2008).

Discrimination has been demonstrated in areas such as employment, education and health (Puhl & Heuer, 2009), is more common in women (Rothblum, Miller, & Garbutt, 1988) and increases with level of obesity (Roehling, Roehling, & Pichler, 2007). Both explicit (overt) (O'Brien, Latner, Ebner, & Hunter, 2013), and implicit (more subtle) weight stigma has been shown to predict



discriminating behaviours (Bessenoff & Sherman, 2000). Puhl and King (2013) summarised the potential harmful effects of weight stigma to include depression, anxiety, low self esteem, suicidal ideation, body dissatisfaction and maladaptive eating behaviours.

Weight stigma has sometimes been thought to be helpful in motivating weight loss behaviours (Ogden, 2013). This perspective has been shown to be unfounded (Carels et al., 2009), as weight stigma negatively influences motivation to exercise (Vartanian & Novak, 2011), reduces the health care seeking behaviours of people who are obese (Drury & Louis, 2002) and is positively correlated with increased disordered eating (Ashmore, Friedman, Reichmann, & Musante, 2008).

Much of the study of weight stigma has focused on health professionals, with the topic receiving considerable media and research attention over the past 10 years (Puhl & Heuer, 2009). People who are overweight state that they are treated differently by health care providers (Hebl, Xu, & Mason, 2003). A study of 2,284 doctors showed both explicit and implicit weight stigma (Sabin, Marini, & Nosek, 2012) and other health professions perform similarly when tested on weight stigma including: nurses (Mulherin, Miller, Barlow, Diedrichs, & Thompson, 2013), exercise scientists (Chambliss, Finley, & Blair, 2004) and dieticians (Stone & Werner, 2012). Despite the size and impact of the physiotherapy profession (Higgs, Refshauge, & Ellis, 2001), there has been little investigation of physiotherapists' attitudes towards weight. Sack, Radler, Mairella, Touger-Decker, and Khan (2009) reported that physiotherapists had neutral attitudes to people who are obese, despite their finding that over 50% of physiotherapists studied believed that people who are obese are weak willed, non-compliant, and unattractive. These results suggest that physiotherapists do possess negative stereotypes of overweight people and may exhibit weight stigma. To the authors' knowledge no study more specific to weight stigma in physiotherapists has been conducted. This research addressed this gap in the literature. The research questions were:

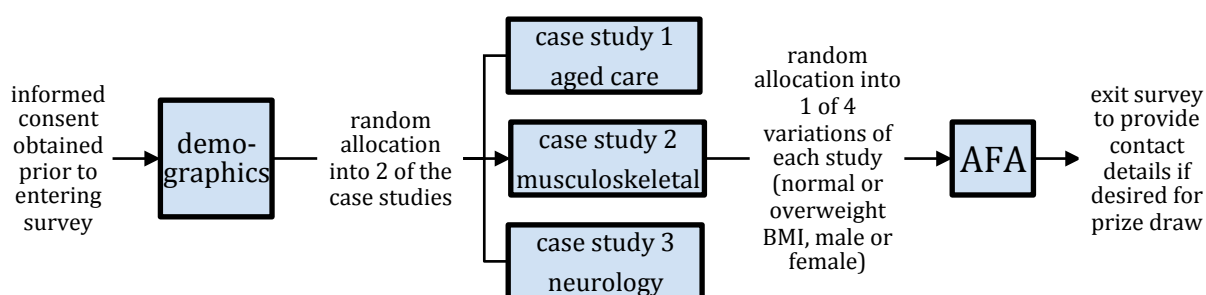
1. Do physiotherapists demonstrate explicit weight stigma?
2. Do physiotherapists demonstrate implicit weight stigma?

## **METHOD**

### **Design**

This cross sectional study used an on-line survey formatted into the software Qualtrics. A pilot study was completed by a convenience sample of physiotherapists (n=13, age range 23-55, from musculoskeletal, paediatric, women's health and neurology specialty areas) to confirm blinding, assess for errors and to gauge physiotherapists' thoughts about undertaking the survey. Minor changes were made in response. Ethics approval was granted at both Curtin University and The

University of Queensland. Participants consented to completing the survey after reading an information sheet. The survey (Appendix 1) consisted of demographic questions, the pre-existing Anti-fat Attitudes Questionnaire (AFA) developed by Crandall (1994), and three custom built case studies (see Figure 1 for survey flow and randomisation). Completion of all sections of the survey was not compulsory. Blinding to the main independent variable (BMI category) was necessary for the case study section of the survey as it aimed to measure implicit (more hidden/subtle) stigma. To ensure blinding, information given to participants before the study mentioned only attitudes generally, not weight. The case studies were presented before the AFA with no option to review retrospectively. Further, the case studies presented a number of patient characteristics including weight, so that the participants were unaware of the variable of interest. Blinding was confirmed in the pilot study.



**Figure 1.** Survey flow and system of random allocation (by survey software) into case study presentations.

Explicit weight stigma was measured by the total scores on the AFA, as well as the score on each of the three subscales: willpower, fear and dislike. The AFA was chosen for its psychometric rigor (Allison & Baskin, 2009), its use in other studies investigating health professionals (Edward et al., 2013; O'Brien, Hunter, & Banks, 2007; Puhl, Latner, King, & Luedicke, 2014) and the suitability of the questions. The dislike subscale measures aversion towards overweight people, the fear subscale measures fear of one's own body weight increase, and the willpower subscale measures the level of personal control ascribed to body weight. Cronbach's alphas were: dislike (0.81), fear (0.78) and willpower (0.73). The AFA has 13 questions scored on a Likert type scale from 0-8, with any score greater than zero indicating weight stigma. Wording was adapted slightly without altering meaning to make the questions suitable for professional Australian participants. For example, 'If I were an employer looking to hire, I might avoid hiring a fat person' was changed to 'If I were an employer, I might avoid hiring an overweight person' (see Appendix 1 for all AFA items).

Implicit weight stigma was measured using participants' responses to three case studies (Appendix 1). Comparisons were made between cases, which were identical apart from BMI category (normal or overweight/obese), and free text responses were analysed thematically. Case studies were chosen as they have clinical relevance and can investigate implicit attitudes. Other measures such as implicit attitudes tests are available, but their ability to predict behaviours is contested (Oswald, Mitchell, Blanton, Jaccard, & Tetlock, 2013). The case studies were designed to be typical presentations of various physiotherapy patient presentations from a number of clinical areas so that most physiotherapists would feel qualified to comment on them, and no one clinical discipline was given preference. The clinical cases were designed by a physiotherapist with 18 years of clinical experience (the primary author). Feedback from the pilot study confirmed similarity of the cases to real physiotherapy patients. Questions (see Appendix 1) were designed to detect differences in treatment of patients of different BMI categories with dependent variables such as (hypothetical) length of initial treatment and amount of time treating 'hands-on'. These clinical parameters were based on dimensions outlined by Stone and Werner (2012), who identified that treatment of patients who are overweight varied from those of normal weight in three areas: instrumental avoidance (e.g., shorter sessions), professional avoidance (e.g., less energy/effort) or interpersonal avoidance (e.g., negative tone, evasive verbal and body language).

### **Participants, therapists, centres**

Qualified Australian physiotherapists were recruited via Australian Physiotherapy Association eBulletins and twitter posts, and through the primary author's professional networks. A number of measures were employed to ensure a good response rate: snowballing was encouraged, an incentive prize was offered for participation and the survey was kept as brief as possible. The exclusion criteria were: not being a qualified physiotherapist, not identifying as Australian and prior knowledge of the research topic.

### **Data analysis**

*A priori* calculations estimated 180 participants were required for sufficient power for the case study comparisons. Power was set at 95%. Descriptive statistics were calculated for the AFA and its subscales. For the case studies, after assessing assumptions of normality, comparisons were made using independent sample t-tests to determine the effect of the independent variable (normal or overweight/obese BMI) on parametric dependent variables. Mann Whitney and Chi Squared tests were used for comparisons where data were non-parametric. Demographic data were used to control for confounding factors such as years of experience or area of clinical expertise. Analysis of

the free text responses (Braun & Clarke, 2006) used a theoretical thematic and count approach. After all of the data were analysed using manual coding, responses that had comments relevant to the research topic were selected as a subset (these were all responses to case studies of patients who were overweight). Three of the authors, including two psychologists (BW, LJ) and one physiotherapist (JS), identified common themes relevant to the research topic in this subset. These themes were subsequently explored in the context of current literature on weight stigma.

## **RESULTS**

### **Flow of participants through the study**

A random sample was not taken for this study, however, the demographics collected (Table 1) show that the participants represented a broad range of physiotherapists similar to national statistics (Physiotherapy Board of Australia, 2013; Health Workforce Australia, 2014). The sample was similar to national statistics in age, gender and area of specialty distribution, but had slightly more rural participants, more years of experience and some differences in employment sector distribution (Table 1). Three hundred and twenty four surveys were commenced and 265 remained after removing responses with insufficient demographic information (1), countries other than Australia (13) or without any responses to at least one case study (45). A total of 520 case studies were completed. Responding to all questions was not mandatory however there were less than 3% incomplete responses to quantitative questions (including the AFA) and 31% for free text responses, which was sufficient for all power calculations.

**Table 1.** Participant demographics. Mean (SD) or number (percentage) and comparisons with national data (Physiotherapy Board of Australia, 2013; Health Workforce Australia, 2014) for each characteristic.

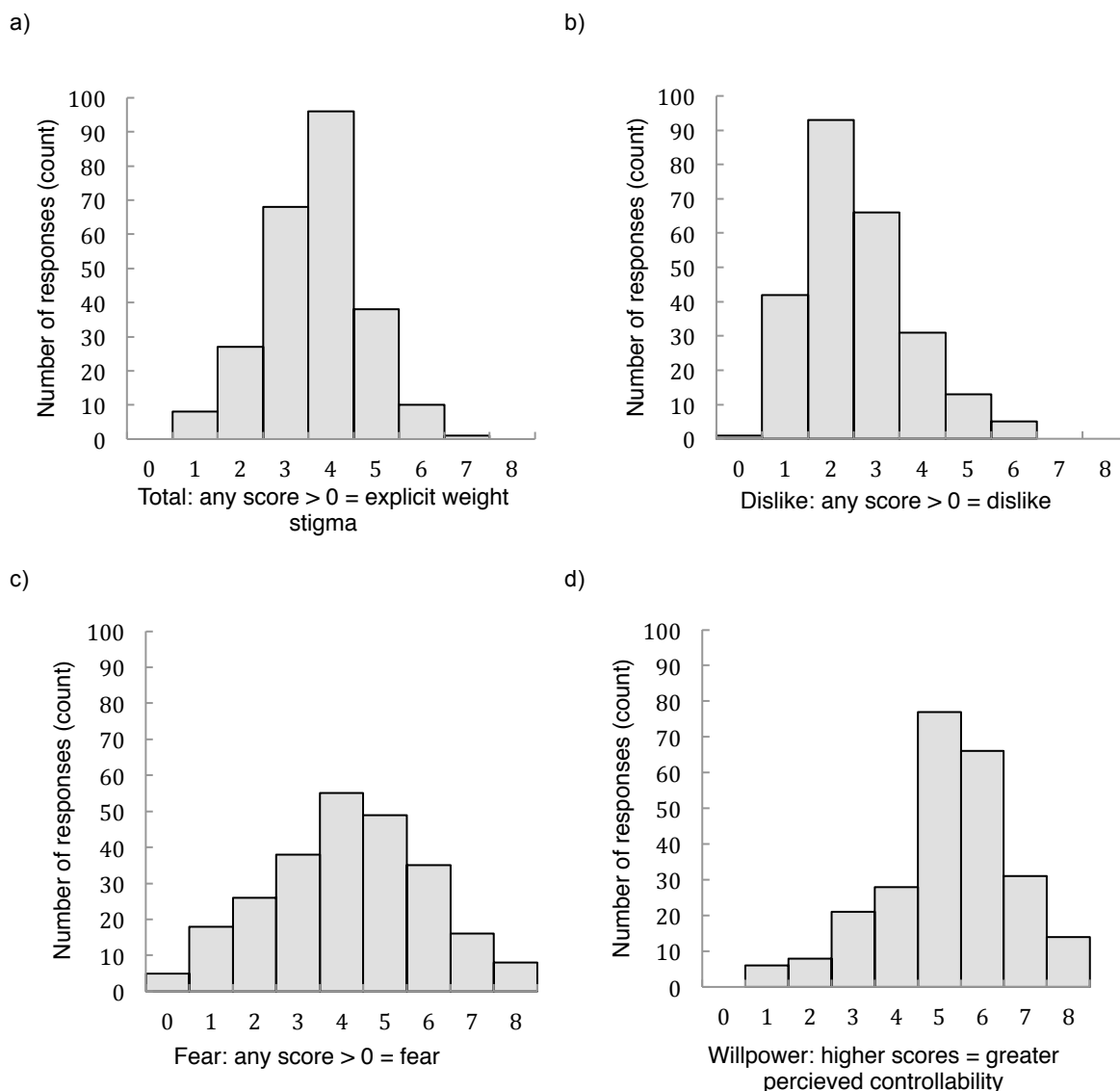
<b>Characteristic</b>	<b>Participants</b>	<b>National Data</b>
	<b>mean (SD)</b>	<b>mean (SD)</b>
<b>Age (yrs)<sup>^</sup></b>	42 (11)	39 (*)
<b>Years of practice<sup>^</sup></b>	18 (11)	13 (*)
	<b>n (%)</b>	<b>n (%)</b>
<b>Gender (female)<sup>+</sup></b>	194 (73)	16474 (70)
<b>Specialty<sup>^</sup></b>		
Neurology	19 (7)	1227 (7)
Cardiorespiratory	16 (6)	1170 (7)
Sports	8 (3)	603 (3)
Musculoskeletal	123 (46)	9534 (53)
Paediatrics	31 (12)	1004 (6)
Women's health	10 (3)	433 (2)
Other	56 (20)	3429 (19)
Missing/not adequately described	2 (1)	580 (3)
<b>Total</b>	256(100)	17980(100)
<b>Main employment location<sup>^</sup></b>		
Urban	190 (72)	16129 (80)
Rural	73 (27)	3952 (20)
Missing	2 (1)	*
<b>Total</b>	256(100)	20081(100)
<b>Main employment sector<sup>^</sup></b>		
Private Practice	96 (36)	7825 (39)
Hospital	98 (37)	5788 (28)
Community	20 (8)	2893 (14)
Education facility	30 (11)	610 (3)
Other	20 (8)	2393 (12)
Not currently working as physiotherapist	1 (0)	0 (0)
Not stated/inadequately stated	0 (0)	572 (3)
<b>Total</b>	256(100)	20081(100)

National data from <sup>+</sup>Physiotherapy Board of Australia (2013) and <sup>^</sup>Health Workforce Australia (2014)

\* not presented in national data

## Do physiotherapists demonstrate explicit weight stigma?

AFA results (Figure 2) indicated negative attitudes by the participants towards people who are overweight with a mean item score of 3.2 (SD 1.1), where results greater than zero indicate weight stigma (Crandall, 1994). These results are considerably higher than other Australian and international AFA findings in 2001 (Crandall et al., 2001) and similar to Australians tested in 2007 (O'Brien et al., 2007). The willpower subscale had a mean item score of 4.9 (SD 1.5) and the fear subscale a mean item score of 3.9 (SD 1.8), which were relatively higher mean scores than the dislike subscale (2.1, SD 1.2). This finding of overtly negative attitudes towards people who are overweight or obese indicates that physiotherapists demonstrate explicit weight stigma.



**Figure 2.** Anti-Fat Attitudes questionnaire (Crandall, 1994) results shown as mean item scores for the a) total questionnaire (13 items) and its subscales b) dislike (7 items), c) fear (3 items) and d) willpower (3 items). All items were scored on a 0-8 Likert scale with 0 indicating no anti-fat attitudes.

### Do physiotherapists demonstrate implicit weight stigma?

There was minimal indication in the clinical parameters tested in the case studies, such as length of treatment time or amount of time treating ‘hands-on’, that patients would be treated differently in different BMI categories (Table 2 and 3). The only differences that reached significance were three (6%) of the answers to questions about types of treatment likely to be given. This indicates a minimal difference in (hypothetical) treatment of patients when considering BMI. Of note, however, for case study 2, general health advice was prescribed in 46% of the obese patients, which was greater ( $p < 0.01$ ) than 24% in the normal weight case study presentation. This could indicate implicit weight stigma in that physiotherapists may assume patients who are obese are less well

informed about general health than their normal weight counterparts. There was no indication of implicit weight stigma in findings from participants' responses to questions (for wording see Appendix 1) about their level of professional satisfaction ( $p = 0.45$ ) or enjoyment ( $p = 0.98$ ) when treating patients in the case studies, with no difference found between normal and overweight patients. However, when participants were asked to rate how similar they felt to case study patients, participants felt more similar ( $p = 0.05$ ) to patients who are overweight (mode 'not similar') in comparison to normal weight (mode 'not similar'). Feeling similar to someone has been correlated with liking them (Byrne, 1997) so this finding on its own would not indicate negative attitudes, however, this may fit with the 'jolly fat' stereotype (Tiggemann & Rothblum, 1988), so may indicate weight stigma.

**Table 2.** Case study comparisons outcomes between normal BMI and overweight BMI

	<b>Normal BMI</b>	<b>Overweight BMI</b>	<b>Significance</b>
	<b>mean(SD)</b>	<b>mean(SD)</b>	<b>p value (df)<sup>†</sup></b>
Initial treatment time (mins)	46(15)	45(16)	0.66(515)
Time treating 'hands-on' (mins)	19(10)	19(11)	0.84(508)
Total time treating patient (mins)	252(175)	244(178)	0.62(505)
Number of exercises given	3.7(1.6)	3.8(1.4)	0.29(514)
	<b>mode</b>	<b>mode</b>	<b>p value<sup>^</sup></b>
Similarity to patient	not similar	not similar	0.05*
Enjoyment treating	enjoyable	enjoyable	0.98
Professional satisfaction	enjoyable	enjoyable	0.45

\*significant at  $p < 0.05$ , <sup>†</sup>from independent sample t-tests, <sup>^</sup>from Mann Whitney tests

**Table 3.** P values from Chi Squared tests comparing normal and overweight BMI categories by treatment modality in case studies.

	<b>Case study 1</b>	<b>Case study 2</b>	<b>Case study 3</b>
Joint mobilisations	0.24	0.57	0.31
Soft tissue massage	0.29	0.23	0.03*
Neuromuscular facilitation	0.21	0.29	0.31
Passive stretching	0.09	0.57	0.36
Acupuncture	0.21	0.39	0.31
Electrotherapies	0.57	0.40	0.03*
Heat	0.51	0.52	0.11
Aerobic exercise	0.12	0.14	0.09
Strength exercises	0.27	0.50	0.61
Stretching exercises	0.40	0.32	0.41
General health advice	0.39	0.00*	0.10
Balance	0.57	1.00	0.22

\*significant at  $p < 0.05$  indicating a difference in (hypothetical) treatment modality chosen.

Analysis of the two questions requiring free text responses identified that conversations about weight are likely to occur. One hundred and eighteen (59%) of free text responses to case studies for patients who were overweight mentioned weight management as part of their treatment or referral strategies. From this subset of 118 responses, five themes were identified that indicated implicit weight stigma: 1) negative language when speaking about weight in overweight patients ( $n=41$ , 35%), 2) focus on weight management to the detriment of other important considerations

(n=12, 10%), 3) weight assumed to be individually controllable (n=69, 58%), 4) directive or prescriptive responses rather than collaborative (n=96, 81%) and, 5) complexity of weight management not recognised (n=98, 83%). The first theme was illustrated by negative terms used about body weight: a patient who was overweight had a 'weight issue/weight problem' that 'needed to be/must be/should be' 'managed/addressed'. The second theme was most evident in the case study of the patient in an aged care setting. Weight management was often mentioned for this patient with a reduced focus (in comparison to the normal weight presentation) on other important factors such as social support. The third theme (assumed controllability of weight) was evident in that diet and/or exercise were almost the only weight management strategies mentioned. The fourth theme of directive communication was demonstrated in the choice of language such as 'speak to them about weight management' or 'he should lose weight'. Finally, the fifth theme identified a lack of recognition of the complexity of weight management. Specifically, only three (3%) responses questioned BMI as a measurement of adiposity or health, three (3%) mentioned weight management strategies other than diet or exercise (referral to GP, referral to naturopath, mood), and six (5%) responses considered the psychological sensitivity of weight.

## DISCUSSION

This paper explored whether physiotherapists demonstrate weight stigma and whether this might negatively influence patient treatment. The total AFA scores indicated that physiotherapists, in line with studies on many other health professionals (Puhl & Heuer, 2009), demonstrate explicit weight stigma. The scores on the subscales provided more insight into the nature of this stigma and its likely implications for behaviour towards patients who are overweight. The dislike subscale had a relatively low score, however responses were notably high in answer to the question "If I were an employer, I might avoid hiring an overweight person", suggesting physiotherapists' negative attitudes may result in discriminatory behaviours. In contrast, the quantitative responses to the case studies showed little evidence of discriminatory behaviours. In-fact, responses to one question (feeling similar to a patient) indicated a greater liking of patients who were overweight. A similar effect is noticeable elsewhere in physiotherapists' attitudes (Sack et al., 2009), this apparent contradiction is possibly explained by the "jolly fat stereotype" (Tiggemann & Rothblum, 1988), which fits with the stereotype content model (Fiske, 2002). Participants scored most highly on the willpower subscale, indicating physiotherapists are likely to blame people for their body size (Crandall, 1994). This is a common component of weight stigma and, as a result, a number of intervention studies have attempted to address this issue (Anesbury & Tiggemann, 2000; Diedrichs & Barlow, 2011). While these intervention studies generally show that these beliefs are modifiable, weight stigmatising attitudes overall are not reduced (Dánielsdóttir, O'Brien, & Ciao, 2010). For



this reason intervention studies are now beginning to focus elsewhere (Vartanian, 2010).

Participants also scored relatively highly on the fear subscale, which measures negative attitudes towards one's own body weight. Importantly, these attitudes have previously been correlated with discriminatory behaviour (Swami et al., 2010) and thus have become one of the new focuses of intervention studies.

The free text responses to the case studies provided insight into physiotherapists' attitudes towards weight in a clinical context, giving further indication of whether physiotherapists were likely to demonstrate discriminatory behaviours. The questions did not directly address weight, and thus the participants were likely to have discussed weight relatively uninfluenced by the researchers' expectations. One hundred and thirteen participants (96% of the subset with references to weight) demonstrated some element of the five identified weight stigma themes. These forms of weight stigma align with stigmatising experiences reported by overweight patients (Cossrow, Jeffery, & McGuire, 2001; Mulherin et al., 2013).

Generally, most participants' responses were prescriptive or directive and it was rarely acknowledged that a two-way conversation with patients was needed. Broader discussions that considered the complexity and/or sensitivity of the subject of weight were evident in only rare responses that considered patients' prior knowledge, for example: 'her weight issues...the patient could already be addressing those issues'. Although explicitly negative responses were unusual, they provide insight into some of the attitudes that may underlie the more subtle stigma expressed more commonly. These explicit responses included stereotyping of laziness, for example: 'less likely to be compliant due to BMI' and assumptions of necessary ill-health, for example: 'she is way too heavy...on a one way train to a poor quality of life and a short one at that'.

Overall, the analysis of the free text responses show physiotherapists have a number of ways of responding to a patient who is overweight or obese. Nevertheless, the most common responses were simplistic, implicitly negative, prescriptive advice. It was rare for responses to indicate a more complex consideration of weight or explicitly negative/stereotyping attitudes. These findings align with literature on other health professionals (Puhl & Heuer, 2009). Further study is needed to clarify the nature of these attitudes and how they play out in clinical settings.

There were a number of limitations to this study. Bias may have been introduced due to recruitment through professional contacts. However, this is likely to have had a minimal effect due to the small number of people recruited in this way (n=10, if all participated this represents 3.8%) and to the

primary author ensuring that these contacts had no prior knowledge of the nature of the research topic. While responses could have been made mandatory to progress through the survey, this may have reduced the sample size by discouraging some participants from completion. The incomplete surveys were unlikely to have had a strong effect as most participants completed all questions, and there was a relatively large sample size. Although the AFA and case studies are both commonly used and standard methods of looking at attitudes, they are inexact measures of attitudes and have limits in application to actual discriminatory behaviours. The case study format may have lacked sensitivity in examining the more subtle forms of discrimination that are likely to be the clinical manifestations of weight stigma (Stone & Werner, 2012). The uniformity of the responses (see Table 2) suggests that physiotherapists may have very set answers to these types of questions, which may not reflect actual clinical behaviour. Future studies could test the variables in a more direct way (such as conducting focus groups or direct observation of clinical encounters).

This research begins a critical conversation about physiotherapists and weight stigma. The findings show that Australian physiotherapists demonstrate weight stigma, especially in the explicit form, and that this has the potential to negatively affect physiotherapy treatment in patients who are overweight or obese. This conversation is not new to health as it has been the focus of considerable popular and academic discourse in the past decade or so. When examining the physiotherapy profession reflexively there are intrinsic elements that may mean that physiotherapists are not currently well equipped to consider the psychological aspects of being involved in discussions about body weight. Firstly, physiotherapists tend to use a ‘treator’ or educator approach rather than a collaborative or empowering approach (Trede, 2006). In relation to body weight this means that physiotherapists may give advice to the patient that is not relevant or may inadvertently cause offence because the patient already knows. Furthermore, physiotherapy has been criticised from within the profession for lacking self reflection (Clouder, 2000; Praestegaard & Gard, 2013). With regards to weight this means that physiotherapists may not detect whether their attitudes affect their patients.

Clinically, it is suggested that physiotherapists consider implementing the following evidence based strategies to minimise the negative effects of weight stigma on their patients. There may be value in physiotherapists reflecting on their own attitudes towards patients who are overweight (Clouder, 2000). Stereotyping of patients who are overweight or obese should be avoided, including making assumptions about patients’ health care practices and knowledge (Teal & Street, 2009). Fostering a collaborative environment that moves beyond patient education may reduce the effects of stigma on patients (Trede, 2012). Support or advice could be sought if physiotherapists have difficulty

understanding how their attitudes may affect patients.

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## Appendix A2 – Preliminary study: Recruitment material



Recruitment material – to be formatted for email or standard mail

Physiotherapist's attitudes to, and perceptions of, their patients.

Seeking qualified physiotherapists for research participation!  
10 minute anonymous online questionnaire  
Your participation can help our profession learn and grow!

Dear colleague,

I am an Australian physiotherapist with a diverse clinical background beginning some research into our profession. The attitudes and perceptions of physiotherapists towards their patients have rarely been studied. Looking at this helps us to better understand ourselves as professionals and to ensure we are working ethically and respectfully.

My research is a collaborative project with Curtin University (Physiotherapy Department) and the University of Queensland (Psychology Department) as part of the requirements of both a coursework Grad Cert and a PhD.

Participation in this research involves filling out an anonymous online survey. It will take roughly 10 minutes to complete. For more details please refer to the attached UQ participant information sheet.

Ethics approval has been sought and gained by both universities: reference numbers: 13-PSYCH-MPhil-11-TS (UQ) and PT 232/2013 (Curtin).

Please feel free to forward this and the information sheet on to any physiotherapist/physiotherapy place of work that you think might be interested in participating in this research.

Yours Sincerely



## Appendix A3 – Preliminary study: Participant information sheet

# Participant Information Sheet

Physiotherapist's attitudes to, and perceptions of, their patients.

### The purpose of the study

The purpose of this study is to examine physiotherapist's attitudes towards different patient groups. This study is being conducted by Jenny Setchell as part of the requirements for a Grad Cert of Clinical Physiotherapy degree at the Curtin University and a PhD at the University of Queensland (Psychology).

### Participation and withdrawal

Participation in this study is completely voluntary and you are free to withdraw from this study at any time without prejudice or penalty. If you wish to withdraw, simply stop completing the questionnaire.

### What is involved?

Participants are asked to anonymously complete a brief online questionnaire. This includes your own demographic details, a brief response to two case studies and your attitudes to a group of people. After the survey participants will be asked if they wish to be kept informed of the progress of the study or if they would be interested in participating in further studies. Any contact details given will be automatically separated from responses to the questionnaires so that these remain anonymous. Participation in this study will take approximately 10 minutes.

### Risks

Participation in this study should involve no physical or mental discomfort, and no risks beyond those of everyday living. If, however, you should find any question to be invasive or offensive, you are free to omit answering or participating in that aspect of the study.

### Confidentiality and security of data

All data collected in this study will be stored confidentially. Only members of the research team will have access to identified data. All data will be coded in a de-identified manner and subsequently analysed and reported in such a way that responses will not be able to be linked to any individual. The data you provide will only be used for the specific research purposes of this study.

### Ethics Clearance and Contacts

This study has been cleared in accordance with the ethical review processes of the University of Queensland (#13-PSYCH-MPhil-11-TS) and Curtin University (#PT 232/2013) and within the guidelines of the National Statement on Ethical Conduct in Human Research. You are, of course, free to discuss your participation with project staff (contactable on: \_\_\_\_\_). If you would like to speak to an officer of the University not involved in the study, you may contact one of the School of Psychology Ethics Review Officers: Jolanda Jetten ([j.jetten@psy.uq.edu.au](mailto:j.jetten@psy.uq.edu.au), tel 3365 4909), Jeanie Sheffield ([jeanie@psy.uq.edu.au](mailto:jeanie@psy.uq.edu.au), tel 3365 6690), Thomas Suddendorf ([tsuddend@psy.uq.edu.au](mailto:tsuddend@psy.uq.edu.au), tel 3365 8341) or Alex Haslam ([uqshasla@uq.edu.au](mailto:uqshasla@uq.edu.au), tel 3346 7345). Alternatively, you may leave a message with Ann Lee (3365 6448) [a.lee@psy.uq.edu.au](mailto:a.lee@psy.uq.edu.au), for an ethics officer to contact you, or contact the University of Queensland Ethics Officer, Michael Tse, on 3365 3924, e-mail: [humanethics@research.uq.edu.au](mailto:humanethics@research.uq.edu.au)

If you would like to learn the outcome of the study in which you are participating, you can contact me at the email below after 20<sup>th</sup> October 2013, and I will send you an Abstract of the study and findings.

Thank you for your participation in this study.

## Appendix A4 – Preliminary study: Survey wording

\* formatted into Qualtrics on-line survey software

### Demographics

Are you a qualified physiotherapist (**Yes** or **No**)

If **NO**: Thank you for your interest in this study however, this survey is only for qualified physiotherapists. (end of survey)

If **YES**:

What year did you graduate as a physiotherapist (open answer)?

What is your main employment location (choose one): **rural/country setting** or **urban/city/metropolitan setting**

Which of the below best describes your main employment area (choose one): **private practice, community, teaching, research, public hospital, private hospital, not currently working in physiotherapy, retired, other** (please clarify)

Main physiotherapy specialty currently employed in (choose one) Which of the following best describes the main physiotherapy area/speciality you are currently working in?: **neurology, orthopaedics, cardiac, respiratory, sports, musculoskeletal, paediatrics, women's health, other** (please clarify)

Total of years working as a physiotherapist How many years in total have you worked as a physiotherapist? (open answer)

What is your primary country of employment (open answer)

Age (open answer)

Gender (choose one **Male, Female, Transgender, Other**)

### Case Studies to examine implicit weight stigma

- Each case study has the same set of questions which are presented here after Case Study 3
- Each case study has 4 presentations with BMI (normal or overweight/obese) or gender (male or female) manipulated.
- Participants will answer questions to 2 versions of the case studies (randomised)

#### Introduction:

Please answer each question as it appears under the case study. Some may seem difficult to answer given the limited information available. Please just provide your best estimate. There are no right or wrong answers in this context – simply your initial response as a physiotherapist.

### **Case Study 1:**

Imagine you work in an aged care setting. You are asked to assess a 75 year old male (female) patient who has had 2 falls reported in the last week. He (She) has been walking independently. Nursing staff are wondering if he (she) requires a walking aid. On reading his (her) medical notes you determine that he (she):

- is medically well
- has a BMI 23 (normal) (BMI 28 (overweight))
- has mildly reduced cognitive abilities (early stages of dementia)
- enjoys gardening

### **Case study 2:**

Imagine you work in a musculoskeletal outpatient setting. A patient complaining of shoulder pain, which radiates to the deltoid insertion, presents for an initial assessment. He (She) is a 20 year old university student. On initial examination he (she):

- has pain when using his arm repetitively above shoulder height
- has pain when lying on that shoulder at night
- demonstrates full ROM with pain between 80 and 120 degrees abduction
- reports no previous history of injury
- has good general health apart from asthma which is well managed by medication
- has a BMI of 32 (moderately obese) (BMI of 22 (normal))
- walks 40 mins most days and attends the gym 2 x weekly

### **Case study 3:**

Imagine you work in a neurology setting. You assess a patient with multiple sclerosis (MS) for the first time who is experiencing an acute relapse. She (He) is a 40 year old mother (father) with a BMI of 28 (overweight) (BMI of 23 (normal)). She (He) works part time in information technology and has had the diagnosis of MS for 3 years with minimal effect on her (his) daily life until this past week. On examination she (he) has:

- a moderately ataxic gait
- weakness in the (R) quadriceps and dorsiflexors (4/5)
- poor dynamic standing balance
- mildly hypertonic (L) wrist/finger flexors

### **Questions:**

How long (in minutes) would you expect your initial assessment/treatment to take if you had no external restriction on time?

Of this initial session how long (in minutes) would be likely to be 'hands on'?

How many exercises would you expect to give this patient to do outside of your session (at home/with nursing staff/family etc.)?

How many treatment sessions would you predict that you would need to treat this patient?

On average how long (in minutes) would any subsequent sessions be likely to last?

On average how long (in minutes) would you expect to treat 'hands on' during these subsequent

sessions?

Would your treatments/take home advice be likely to include any of the following (select as many as you like): **joint mobilisation, soft tissue massage, neuromuscular facilitation, passive stretching (done by you), acupuncture, electrotherapies, ultrasound, heat, aerobic exercise, advice on adapting ADLs, strengthening exercises, stretching exercises, general health advice, balance exercises.**

Would this patient be a professionally satisfying case for you to treat? Likert scale

How similar do you think you are to this patient? Likert scale

Would you enjoy treating this patient? Likert scale

Would you like this patient? Likert scale

Are there any other thoughts or comments on this patient and their presentation?

If you look at this patient holistically are there any other areas of health aside from the main presenting problem that you feel might be relevant to comment on?

### **Anti-Fat Attitude Questionnaire to test explicit weight stigma**

\* wording adjusted slightly (without changing meaning) to be appropriate for professional, Australian participants

**Introduction:** This second and final section asks for your attitudes towards a certain group of people. Please answer as honestly as possible, even if the questions seem a bit unusual. Your answers are anonymous.

Dislike

1. I dislike people who are overweight or obese.
2. Few of my friends are overweight or obese.
3. I tend to think that people who are overweight are a little untrustworthy.
4. Although some overweight people must be intelligent, generally I think they tend not to be.
5. I have a hard time taking overweight people too seriously.
6. Fat people make me somewhat uncomfortable.
7. If I were an employer, I might avoid hiring an overweight person.

Fear of Fat

8. I feel disgusted with myself when I gain weight.
9. One of the worst things that could happen to me would be if I gained 10kgs.
10. I worry about becoming fat.

Willpower

11. People who weigh too much could lose at least some part of their weight through a little exercise.
12. Some people are overweight because they have no willpower.
13. It is people's own fault if they are overweight.

**Concluding statement:**

Thank you for responding to this survey; your time is very much appreciated. This project explores whether we inadvertently exclude or disadvantage certain groups of patients. It seeks to understand if our perceptions of patients influences quality of care and subsequent health outcomes. This can help our profession by promoting ethical and inclusive practice.

If you have any further questions or comments on this please don't hesitate to contact me:  
email address

Please **don't share** the details of this study with other physiotherapists who may take this survey, as it may bias or prejudice the participant's responses.

## Appendix B1 – Study 1: Recruitment material



Have you ever seen a physiotherapist?

We would love to speak with you about your experiences.

This study is part of a PhD project.  
Please email or call Jenny for more details  
Contact details.

## Appendix B2 – Study 1: Participant information sheet



### School of Psychology

## Participant Information Sheet

### Patients' experiences of interactions with physiotherapists involving body weight/weight management.

#### The purpose of the study

The purpose of this study is to examine from a patients' perspective how physiotherapists interact with their patients about weight. Knowledge gained from this study will help educate health professionals to ensure that people of all sizes are treated with equal respect. This study is being conducted by Jenny Setchell as part of the requirements for a PhD at the University of Queensland under the supervision of Dr Bernadette Watson.

#### Participation and withdrawal

Participation in this study is completely voluntary and you are free to withdraw at any time without prejudice or penalty. If you wish to withdraw, let us know or let us know that you don't wish to answer a certain question. If you do withdraw from the study, you may request that the materials that you have completed to that point will be deleted.

#### What is involved

Participants are asked to attend one face-to-face interview in which you will answer some questions about your experiences of interactions with physiotherapists. You will then be asked to respond to some prompting follow up questions in a diary format. A second (telephone) interview will be requested approximately two weeks after the first. Participation in this study will take approximately 45 minutes for the first interview, approximately 30 minutes in diary responses and 30 minutes for the second interview (total time 1hr 45mins).

#### Risks

Participation in this study should involve no physical or mental discomfort, and no risks beyond those of everyday living. If, however, you should find any question or procedure to be invasive or distressing, you are free to omit answering or participating in that aspect of the study.

#### Confidentiality and security of data

All data collected in this study will be stored confidentially. Only members of the research team will have access to identified data. All data will be coded in a de-identified manner and subsequently analysed and reported in such a way that responses will not be able to be linked to any individual. The data you provide will only be used for the specific research purposes of this study.



### Ethics Clearance and Contacts

This study has been cleared in accordance with the ethical review processes of the University of Queensland and within the guidelines of the National Statement on Ethical Conduct in Human Research. You are, of course, free to discuss your participation with project staff (contactable on: \_\_\_\_\_). If you would like to speak to an officer of the University not involved in the study, you may contact one of the School of Psychology Ethics Review Officers: Jolanda Jetten ([j.jetten@psy.uq.edu.au](mailto:j.jetten@psy.uq.edu.au), tel 3365 4909), Jeanie Sheffield ([jeanie@psy.uq.edu.au](mailto:jeanie@psy.uq.edu.au), tel 3365 6690), Thomas Suddendorf ([tsuddend@psy.uq.edu.au](mailto:tsuddend@psy.uq.edu.au), tel 3365 8341) or Alex Haslam ([uqshasla@uq.edu.au](mailto:uqshasla@uq.edu.au), tel 3346 7345). Alternatively, you may leave a message with Ann Lee (3365 6448) [a.lee@psy.uq.edu.au](mailto:a.lee@psy.uq.edu.au), for an ethics officer to contact you, or contact the University of Queensland Ethics Officer, Michael Tse, on 3365 3924, e-mail: [humanethics@research.uq.edu.au](mailto:humanethics@research.uq.edu.au)

If you would like to learn the outcome of the study in which you are participating, you can contact me at the email above after November 2014, and I will send you a summary of the study and findings.

Thank you for your participation in this study.

## Appendix B3 – Study 1: Demographic and consent forms



**School of Psychology**

### Participant Consent Form

Patients' experiences of interactions with physiotherapists involving body weight/weight management

Dear Participant

Your informed consent is required to participate in this research. In signing this form, you agree that you have read and understood the "Participant Information Sheet" for this research project. You consent to participate in two audio-recorded interviews (which will be transcribed) and the diary. You are free to withdraw at any time.

Full Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

**School of Psychology**

**Participant Information**

Patients' experiences of interactions with physiotherapists  
involving body weight/weight management

Age: \_\_\_\_\_

Gender: \_\_\_\_\_

Race/culture/ethnicity: \_\_\_\_\_

Age at finishing school: \_\_\_\_\_

Highest qualification after leaving school: \_\_\_\_\_

Occupation: \_\_\_\_\_

## Appendix B4 – Study 1: Interview guides and diary

### Interview Guide

1<sup>st</sup> interview (situated in a private health clinic)

1. Can you describe on what occasions you have seen a physiotherapist?
2. Did you have any thoughts or feelings that related to your body weight in any way as you were deciding to whether to attend a physiotherapy session?

3. Can you describe an interaction you have had with a physiotherapist that involved something to do with your body size?

Possible follow up questions:

- Could you expand on ..... please?
- Do you remember any words or phrases or how things were ‘put’?
- Is there anything about the physical environment (e.g. equipment/furniture) in this clinic (or others like it that you have been in) that you have noticed has any relevance to your body size? For example makes you feel comfortable or uncomfortable?
- Did you have any sense that the physiotherapist found the interaction with you satisfying or unsatisfying?
- Did you feel that the reason you went to see the physiotherapist in the first place was adequately addressed?

4. Do you have any suggestions about how this experience could have been made more positive for you as a patient?

Possible follow up questions:

- Can you expand on ..... please?

I think that’s basically everything I wanted to ask. Do you have anything else you would like to raise or final thoughts you have had? Anything you think that might be relevant that I haven't asked?

### Diary

On reflection, if you have any more thoughts about the topics discussed in the interview or anything related you can use this ‘diary’ to note your ideas so that we can speak about them when we have the second interview in two weeks.

1. Have you had any other thoughts about the experience(s) that related to your body weight in a physiotherapy environment?
2. Have you had any other ideas that you would like to share about how to make these (or other similar) experiences more positive for you/other physiotherapy patients?

2<sup>nd</sup> interview (telephone)

1. On reflection, and using your diary to prompt you as needed, do you have any more thoughts about the experience of weight related interactions with physiotherapists which you described in the first interview?

Possible follow up questions:

- Can you expand on ..... please?

## Appendix C1 – Study 2: Recruitment material



Recruitment material – to be formatted for email or standard mail

Physiotherapists' experiences of interactions with patients involving body weight/weight management.

Seeking qualified physiotherapists for research participation.  
Your participation can help our profession learn and grow.

Dear colleague,

I am an Australian physiotherapist with a diverse clinical background undertaking research into our profession. The attitudes and perceptions of physiotherapists towards their patients have rarely been studied. Looking at this helps us to better understand ourselves as professionals and to ensure we are working ethically and respectfully.

The purpose of this study is to examine, from physiotherapists' perspectives, how physiotherapists interact with their patients about weight. Knowledge gained from this study will help educate health professionals to manage interactions with patients that involve weight. This study is being conducted by me, Jenny Setchell, as part of the requirements for a PhD at The University of Queensland under the supervision of Dr Bernadette Watson.

Participation in this research involves joining in a focus group with other physiotherapists, this takes about one hour.

Ethics approval has been gained from The University of Queensland: reference number: 14-PSYCH-DGP-49-AH.

Please feel free to forward this and the information sheet on to any physiotherapist/physiotherapy place of work that you think might be interested in participating in this research.

Yours Sincerely



School of Psychology

## Participant Information Sheet

### Patients' experiences of interactions with physiotherapists involving body weight/weight management.

#### The purpose of the study

The purpose of this study is to examine, from physiotherapists' perspectives, how physiotherapists interact with their patients about weight. Knowledge gained from this study will be used to help educate health professionals to manage interactions with patients that involve weight. This study is being conducted by Jenny Setchell as part of the requirements for a PhD at the University of Queensland under the supervision of Dr Bernadette Watson.

#### Participation and withdrawal

Participation in this study is completely voluntary and you are free to withdraw at any time without prejudice or penalty. If you wish to withdraw, let us know or let us know that you don't wish to answer a certain question. If you do withdraw from the study, you may request that the responses that you have given to that point be deleted and excluded from the study (where responses are primarily yours and not necessary to clarify responses from others in the focus group).

#### What is involved

Participants are asked to attend a focus group with other physiotherapists in which you will discuss some questions about your experiences of interactions with patients and the topic of body weight in your professional environment. Participation in this study will take approximately 1 hour. The focus group will be audio recorded and then transcribed. You will also have the option of emailing any thoughts you have after participating in the focus group. See below for handling of recorded files and data.

#### Risks

Participation in this study should involve no physical or mental discomfort, and no risks beyond those of everyday living. If, however, you should find any question to be invasive or distressing, you are free to omit answering or participating in that aspect of the study.

#### Confidentiality and security of data

All data collected in this study will be stored confidentially. Only members of the research team will have access to identified data. All data will be coded in a de-identified manner and subsequently analysed and reported in such a way that responses will not be able to be linked to any individual.

#### Ethics Clearance and Contacts

This study has been cleared in accordance with the ethical review processes of the University of Queensland and within the guidelines of the National Statement on Ethical Conduct in Human Research. You are, of course, free to discuss your participation with project staff (contactable on:

\_\_\_\_\_). If you would like to speak to an officer of the University not involved in the study, you may contact one of the School of Psychology Ethics Review Officers: Jolanda Jetten ([j.jetten@psy.uq.edu.au](mailto:j.jetten@psy.uq.edu.au), tel 3365 4909), Jeanie Sheffield ([jeanie@psy.uq.edu.au](mailto:jeanie@psy.uq.edu.au), tel 3365 6690), Thomas Suddendorf ([tsuddend@psy.uq.edu.au](mailto:tsuddend@psy.uq.edu.au), tel 3365 8341) or Alex Haslam ([uqshasla@uq.edu.au](mailto:uqshasla@uq.edu.au), tel 3346 7345). Alternatively, you may leave a message with Ann Lee (3365 6448) [a.lee@psy.uq.edu.au](mailto:a.lee@psy.uq.edu.au), for an ethics officer to contact you, or contact the University of Queensland Ethics Officer, Michael Tse, on 3365 3924, e-mail: [humanethics@research.uq.edu.au](mailto:humanethics@research.uq.edu.au)

If you would like to learn the outcome of the study in which you are participating, you can contact me at the email above after November 2014, and I will send you a summary of the study and findings.

Thank you for your participation in this study.

School of Psychology

## Participant Consent Form

Patients' experiences of interactions with physiotherapists involving body weight/weight management

Dear Participant

Your informed consent is required to participate in this research. In signing this form, you agree that you have read and understood the "Participant Information Sheet" for this research project. You consent to participate in an audio-recorded focus group. You are free to withdraw at any time. The information provided is confidential and will only be used by the research team.

Full Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_



## Demographics

Age \_\_\_\_\_

Gender \_\_\_\_\_

Are you a qualified physiotherapist? \_\_\_\_\_

What year did you graduate as a physiotherapist? \_\_\_\_\_

What are your physiotherapy qualifications?

\_\_\_\_\_  
\_\_\_\_\_

Total of years working as a physiotherapist \_\_\_\_\_

Main physiotherapy specialty currently employed in (e.g. neurology, orthopaedics, women's health etc.):

\_\_\_\_\_

Main employment sector (e.g. public or private hospital, community, private practice, teaching, research etc.):

\_\_\_\_\_

Main employment location (choose one):

**rural/country setting**

**urban/city/metropolitan setting**

## Appendix C3 – Study 2: Focus group guide

### 1. Guidelines for group:

- no right or wrong answers
- confidentiality
- allow others to speak

### 2. Introductory question

Can you give us a very brief outline your physical therapy work history (give example)?

### 3. Guiding questions for discussion:

Have you ever discussed weight with a patient?

- Can you give more detail on....?

Do you think it is important to discuss weight with your patients?

- Can you give more detail on....?

Can you describe what it is like to treat a patient who is overweight?

- Can you give more detail on.....?

What do you think are the main reasons that people might be overweight?

- Can you give more detail on....?

How do you think an overweight person might feel coming to physical therapy?

- Are there any elements of the physical therapy environment that may be relevant to body weight?
- Is there anything about the physical therapy profession 'brand' that may have some relevance to body weight?
- Can you give more detail on....?

Do you think that weight management is part of physical therapists' scope of practice?

- Can you give more detail on....?

### 4. Summary

Present a quick summary of topics discussed to the participants

### 5. Anything else

Ask if there is anything anyone else would like to add on the topic of weight in physical therapy?

## Appendix C4 – Study 2: Debrief



School of Psychology

### Debrief material

Physiotherapists' experiences of interactions with patients involving body weight/weight management.

#### Risks

Participation in this study should involve no physical or mental discomfort, and no risks beyond those of everyday living. If, however, in the unlikely event that you should feel emotionally uncomfortable beyond a level you can easily cope with on your own, the following contact numbers may be useful:

Lifeline: by phone for crisis or suicide support on 13 11 14

Isis: The Eating Issues Centre Inc on 3844 6055 or [info@isis.org.au](mailto:info@isis.org.au)

#### Why is this important to study?

This study explores physiotherapists' interactions with patients involving weight or weight management. Previous studies have shown that physiotherapists, alongside many other health professionals and the general public, demonstrate weight stigma (negative attitudes towards people who are overweight or obese). Investigating attitudes and behaviours of physiotherapists towards their patients' weight is important because there is evidence that the experience of weight discrimination can have negative psychological and physical effects on recipients. This study aims to increase the understanding of how various ways of communicating about weight impacts on patients as well as contributing to an understanding of how to reduce weight stigma in health care interactions.

#### How was this explored?

The questions we asked you related to your experiences of negotiating weight within the context of your work as a physiotherapist. This gives us valuable insight (along with the responses from other participants) into what is helpful or unhelpful in interactions between patients and physiotherapists involving weight from a physiotherapist's perspective. This will help us understand what are the most important areas to target when we try to change how physiotherapists behave towards people who are overweight to reduce the negative effects of weight stigma.

Thank you again for your participation.

### **Appendix D1 – Study 3: Recruitment material**

Jenny Setchell (Senior Physiotherapist at \_\_\_\_\_) is seeking participants for a study from her PhD translating research about interactions in physiotherapy that involve weight into practice. She is looking to recruit a small cohort of currently practicing physiotherapists at any stage of their career who are interested and engaged in their practice and profession.

The main commitment of this study is to attend two group information and discussion sessions. These will be held in Annerley on the following dates:

**Session 1: Saturday 18th April (1-3pm)**

**Session 2: Saturday 9th May (1-3pm)**

There will also be a third, much shorter session either over the phone or in person on **approximately the 30th of May**. The timing of this can be flexible to suit your schedule.

The main benefits to participating in the study include:

- an opportunity to reflect on, and develop your own clinical practice
- time involved can contribute to mandatory professional development requirements
- a chance to win a \$100 shopping voucher!
- contribution to physiotherapy knowledge and effective, ethical patient management

Physiotherapists who are potentially interested in participating in this study can contact:

Kind regards



School of Psychology

## Participant Information Sheet

### Improving weight related interactions in physiotherapy practice.

#### The purpose of the study

The purpose of this study is to improve weight related interactions in physiotherapy practice. Knowledge gained from this study will be used to help educate health professionals to manage interactions with patients that involve weight. This study is being conducted by Jenny Setchell as part of the requirements for a PhD at the University of Queensland under the supervision of Dr Bernadette Watson.

#### Participation and withdrawal

Participation in this study is completely voluntary and you are free to withdraw at any time without prejudice or penalty. If you wish to withdraw, let us know or let us know that you don't wish to participate in a particular part of the study. If you do withdraw from the study, you may request that records of the involvement that you have had to that point be deleted and excluded from the study (where involvement is primarily yours and not necessary to clarify responses from others in the study).

#### What is involved?

Participants are asked to be involved in 3-4 sessions each lasting 0.5-2 hours. The first two sessions will be in-person in a group environment and following sessions will be group or individual in person or by phone. All sessions will be audio recorded and then transcribed. See below for handling of recorded files and data. You will be given a small amount (about 1/2hr) of pre-reading to complete before the first session. After the first 2 sessions you will be asked to make weekly entries into a diary reflecting on changes you make to your clinical practice. It is anticipated that diary entries will take around 15mins per week. In total the time commitment is anticipated to be 6hrs in the sessions and 5hrs reading and diary entry.

#### Potential benefits to participants

This study can help you to reflect on, develop and improve your clinical practice. Participating in this study can also contribute to your mandatory professional development hours as outlined in by the Physiotherapy Board of Australia in the areas of: 'contact with other professionals', 'discussion with colleagues', 'reading' and 'reflecting on experience in day to day activities'. Please keep copies of this document, and related materials from this study, as evidence of your CPD activity. You can also enter a draw to win a \$100 shopping voucher.

#### Risks

Participation in this study should involve no physical or mental discomfort, and no risks beyond those of everyday living. If, however, you should find any question to be invasive or distressing, you are free to omit answering or participating in that aspect of the study.

#### Confidentiality and security of data

All data collected in this study will be stored confidentially. Only members of the research team will have access to identified data. All data will be coded in a de-identified manner and subsequently analysed and reported in such a way that responses will not be able to be linked to any individual.

#### Ethics Clearance and Contacts

This study has been cleared in accordance with the ethical review processes of the University of Queensland and within the guidelines of the National Statement on Ethical Conduct in Human Research. You are, of course, free to discuss your participation with project staff (contactable on: \_\_\_\_\_) If you would like to speak to an officer of the University not involved in the study, you may contact one of the School of Psychology Ethics Review Officers: Julie Henry ([julie.henry@uq.edu.au](mailto:julie.henry@uq.edu.au), tel 3365 6737), Jeanie Sheffield ([jeanie@psy.uq.edu.au](mailto:jeanie@psy.uq.edu.au), tel 3365 6690), Thomas Suddendorf ([tsuddend@psy.uq.edu.au](mailto:tsuddend@psy.uq.edu.au), tel 3365 8341) or Alex Haslam ([uqshasla@uq.edu.au](mailto:uqshasla@uq.edu.au), tel 3346 7345). Alternatively, you may leave a message with Ann Lee (3365 6448) [a.lee@psy.uq.edu.au](mailto:a.lee@psy.uq.edu.au), for an ethics officer to contact you, or contact the University of Queensland Ethics Officer, Michael Tse, on 3365 3924, e-mail: [humanethics@research.uq.edu.au](mailto:humanethics@research.uq.edu.au)

If you would like to learn the outcome of the study in which you are participating, you can contact me on the email address below after December 2015, and I will send you a summary of the study and findings.

Thank you for your participation in this study.

## Demographics

Age \_\_\_\_\_

Gender \_\_\_\_\_

What year did you graduate as a physiotherapist? \_\_\_\_\_

In which country did you first graduate as a physiotherapist? \_\_\_\_\_

What are your physiotherapy qualifications?

\_\_\_\_\_  
\_\_\_\_\_

Total of years working as a physiotherapist \_\_\_\_\_

Main physiotherapy sub-discipline **currently** employed in (e.g. neurology, orthopaedics, women's health etc.):

\_\_\_\_\_

Main employment sector (e.g. public or private hospital, community, private practice, teaching, research etc.):

\_\_\_\_\_

Main employment location (choose one):

**rural/country setting**

**urban/city/metropolitan setting**

School of Psychology

## Participant Consent Form

Improving weight related interactions in physiotherapy practice

Dear Participant

Your informed consent is required to participate in this research. In signing this form, you agree that you have read and understood the “Participant Information Sheet” for this research project. Your consent includes audio-recordings of group and individual sessions. You are free to withdraw at any time. The information provided is confidential and will only be used by the research team.

Full Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_



APPENDIX A

**Pre-reading, session and diary guides**

1<sup>st</sup> session (2hrs)

**Discussion 1:** discuss main findings of pre-reading papers.

- As you were reading the results and suggestions from these papers what were you thinking and feeling?
- How might these findings apply to your day-to-day practice, provide concrete examples if possible?

**Discussion 2:** discussion about participants' own contextual experiences of physiotherapy involving weight. Prompts could include topics such as:

- Participants' experiences of working with people who are overweight
- Participants' experiences of discussing weight with patients
- Main reasons people might be overweight
- In the context of their work when do participants think that weight loss discussions are relevant?

**Summary:** Group summarises main points of session so far

**Individual private reflection and planning exercise:** How might participants implement some of the discussion points in their own practice?

- Written individually, initially on scrap paper
- Sharing is discouraged, as it is important that plans are individual.
- What challenges might I face implementing these changes?
- What might I do to address these changes?
- Put summary into diary

**Diary:** Weekly diary entries include: reflexivity, responses to planned changes from first session. Participants may reflect on intra-personal, interpersonal and environmental (physical or system) issues that come up with implementing the changes planned at the end of the first session.

- Discuss diary

**Check out/debrief**

2<sup>nd</sup> session (2hrs)

**Discussion 1:** open discussion of experiences since previous session

- Implementation of changes planned in previous session
- What facilitated new approaches?
- What barriers were there?
- How might these barriers be overcome?
- Group summary on butcher's paper

**Discussion 2:** (1.50pm, 30 mins) discuss main findings of new paper.

- See Discussion 1, 1<sup>st</sup> session
- Group summarises

**Individual private reflection and planning exercise:** How might participants implement some of the discussion points in their own practice?

- See this section from 1<sup>st</sup> session

**Diary:** review of diary process

**Check out/debrief**

3<sup>rd</sup> Session (up to 2 hrs)

Either in the group or individual interviews

**Discussion 1:** open discussion of experiences since previous session

- See Discussion 1, 2<sup>nd</sup> session

**Discussion 2:** feedback on whole process

- What were thoughts and feelings have come up while you participated in this study?
- Can you discuss any benefits to participating in this study?
- Do you have any suggestions for improvement if we were to run a similar process in the future?

**Check out/debrief**

## Appendix D4 – Study 3: Diary



### School of Psychology

#### Diary

#### Improving weight related interactions in physiotherapy practice

What changes (if any) would you like to make to your own practice/workplace following our session today? (**completed individually during the first two group sessions**)

#### **Weekly Reflection Prompts (6 weeks)**

Reflect on any thoughts or actions in the last working week that relate to the first session of this study.

1. Outline any **intrapersonal issues** that came up when implementing (or considering implementing) changes planned at the end of the first session. E.g., reflections on your own attitudes, ethical issues
2. Outline any **interpersonal issues** that came up when implementing (or considering implementing) changes planned at the end of the first session. E.g., interactions with patients/family/staff
3. Outline any **environmental issues** that came up when implementing (or considering implementing) changes planned at the end of the first session. E.g., issues in the physical environment, issues with the system you work in
4. Note here any other thoughts that came up in response to the first session.

#### **Overall reflection on this study (completed on week 6)**

Do you have any thoughts on the experience, process, design, or outcome of this study?

Do you have any thoughts about any benefits to this study?

Do you have any thoughts about how this study might be improved?

## Appendix D5 – Study 3: Debrief



School of Psychology

### Debrief material

Improving weight related interactions in physiotherapy practice.

#### Risks

Participation in this study should involve no physical or mental discomfort, and no risks beyond those of everyday living. If, however, in the unlikely event that you should feel emotionally uncomfortable beyond a level you can easily cope with on your own, the following contact number may be useful for crisis or suicide support: Lifeline on 13 11 14.

#### Why is this important to study?

This study intends to improve physiotherapists' interactions with patients involving weight or weight management. Previous studies have shown that physiotherapists, alongside many other health professionals and the general public, demonstrate negative attitudes towards people who are overweight or obese. Negative attitudes and behaviours of physiotherapists are important because they can have negative psychological and physical effects on patients. This study explores ways to improve patient/physiotherapist interactions that involve weight and will contribute to understanding how to improve outcomes for patients.

#### How was this explored?

This study gives physiotherapists an opportunity to integrate knowledge gained from previous studies we have conducted into clinical practice. It provides individual physiotherapists with support to design and implement changes that will be relevant to their own clinical contexts. Feedback from participants about this process gives valuable insight into what is helpful or unhelpful in improving interactions between patients and physiotherapists involving weight. This will help physiotherapists understand what are the most important areas to target and will help to improve patient outcomes.

Thank you again for your participation.